ABSTRACT

Title of Dissertation: The Relations Between Children's Self-Concept and Prosocial Behavior

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Prosocial behavior and self-concept have been studied separately by researchers with little attention given to a possible linkage. The primary purpose of this study was to examine the relations between children's spontaneous and requested prosocial behaviors (helping, sharing, comforting, and cooperating) as they related to self-concept (physical, social, and personal). The prosocial behaviors of 58 kindergarten children were observed in their classrooms during free play activities over a seven week period. Each child's self-concept was assessed by The Purdue Self Concept Scale For Preschool Children. Classroom teachers responded to questionnaires evaluating children's prosocial behaviors and their self-concepts. In addition, children provided evaluations of their peers' prosocial behaviors in personal interviews.

Data analysis revealed significant relations between the combined aggregate of spontaneous prosocial behaviors and overall self-concept; total cooperating with self-concept; spontaneous cooperating with self-concept; physical, social, and personal self-concepts with spontaneous cooperating; and between teacher ratings of requested prosocial behaviors and children's observed requested actions. Non significant relations were found between total prosocial behavior and total self-concept; total prosocial behavior and physical, personal, and social self-concept; spontaneous helping, sharing, comforting, and cooperating with self-concept; and requested helping, sharing, comforting, and cooperating with self-concept. Also non significant were the relations between physical, social, and personal self-concepts and spontaneous helping and sharing, and also requested helping, sharing, and cooperating. No significant differences were found between boys and girls with regard to helping, sharing, comforting, and cooperating prosocial behaviors. Teacher evaluation of children's spontaneous prosocial behaviors and their self-concept were also non significant. Non significant relations were found between peer nominations of helping, sharing, comforting, and cooperating behaviors with children's observed helping, sharing, comforting, and cooperating behaviors.

Future researchers may consider varying the prosocial behavior observational techniques and self-concept assessments used in this study. Classroom teachers are encouraged to use various modeling

and reinforcement techniques to promote children's prosocial behaviors. They are also encouraged to provide children with developmentally appropriate classroom practices that challenge their personal, social, and physical abilities, thus promoting positive self-concepts.

THE RELATIONS BETWEEN CHILDREN'S SELF-CONCEPT AND PROSOCIAL BEHAVIORS

by

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DEDICATION

Dedicated to

my mother and father

whose continuous love and

support provided me with the endurance and

persistence that made this degree possible to obtain

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CHAPTER 1

INTRODUCTION

Helping, sharing, donating, cooperating, and comforting are prosocial actions that individuals begin to display at an early age. For years, it was assumed that young children were not capable of exhibiting these prosocial behaviors in their interactions with other children and adults. However, an extensive body of research on prosocial behaviors in young children has provided evidence challenging this assumption. Young children are now described as individuals who are capable of positively meeting the physical and emotional needs of others through their prosocial actions. Yet there appear to be individual differences in the quality and the frequency of these behaviors. What factors predispose some children to engage in acceptable social behaviors such as sharing, helping, and cooperating more than others? What accounts for these individual differences in prosocial behaviors?

In the present study a positive self-concept is viewed as a consequential determinant of prosocial behaviors. This view is supported by two lines of research in which both are traced to early parent-child interaction. These connections are made explicit in recent formulations of attachment theory. Another line of research guided by the social cognitive perspective attributes the development of prosocial behavior and self-understanding to increased levels of perspective-taking and differentiation abilities.

Theoretical Framework

Attachment Perspective

Children's first social and emotional encounters generally occur within the family settings in which children are exposed to various opportunities for interactions with their primary caregivers. The quality of these social interactions during infancy, and the primary relationships subsequently formed, are viewed by theorists such as Bowlby (1973) as significant factors influencing the patterning of children's personalities (Bretherton, 1985). This position is clearly depicted in the underlying assumptions of attachment theory. Bowlby (1973) emphasized the importance of early parent-child relationships and their effects on children's later social and emotional development (Cohn, 1990). The quality of early relationships with primary caregivers and the expectations associated with them in terms of the caregivers' responsiveness and availability, are believed (Bowlby, 1973) to shape children's self-concepts and their prosocial behaviors. Formulations of attachment theory may therefore connect two separate lines of research, one in which positive parent-child relationships are related to prosocial behavior and another in which positive parent-child relationships are related to self-concept development.

Bowlby (1973) suggested that carryover effects of early attachment relationships to future social-emotional development are motivated by the "internal working models" that children come to

formulate about themselves and their primary caregivers. Richters and Waters (1991) explain that these models, which are formed in earlier encounters with primary caregivers, are representational systems of feelings, expectations, beliefs, and attitudes about the self, primary caregivers, and the world. These mental representations guide expectations of others and the self (Bowlby, 1973). Internal working models also guide children's social behaviors and evaluations of social experiences and encounters (Bretherton, 1985), as well as determine how future relationships are established and maintained (Bowlby, 1973). These models that children construct from early relationships have profound effects on how the self and others are viewed, thus affecting the quality of future social interactions (Bowlby, 1973; Bretherton,1985).

Children who experience sensitive and responsive caregiving formulate mental models of caregivers as responsive, helpful, and available and thus, develop complementary models of the self as valuable (Bowlby, 1973; Erickson, Sroufe, & Egeland, 1985). Children who have incorporated a positive sense of self and of others into their working models are generally expected to manifest social competence and positive self-esteem. They are also expected to approach novel situations with confidence and their encounters with peers are also expected to be positive (Bowlby, 1973; Erickson et al., 1985; Sroufe & Waters, 1977). Children who have experienced less responsive relationships, on the other hand, are expected to develop

working models of parents as rejecting and formulate complementary models of themselves as unworthy of love, help, or support which in turn foster a lack of confidence in peer relations (Bowlby, 1973).

Strong support has been presented for Bowlby's original claims that the quality and security of the parent-child early relationship influences future social relations. Erickson et al. (1985) found that children from insecure attachment relationships displayed poor social skills, less compliance, expressed negative emotions, and exhibited higher rates of dependency behaviors in comparison to their securely attached counterparts. Sroufe, Fox, and Pancake (1983) found that securely attached children were less emotionally dependent on their preschool teachers than insecurely attached children who displayed greater amounts of dependency behaviors.

Matas, Arends, and Sroufe (1978) provided further support for continuity and persistence between earlier attachment relations and later social functioning. They found that securely attached infants showed more positive affect, enthusiasm, and persistence in problem-solving, while insecurely attached children displayed poor social adaptation skills. Securely attached children were also characterized by Pastor (1981) as more competent, social, cooperative, and showed greater peer orientation.

Although the attachment perspective has not specifically addressed the mechanisms through which early parent-child relations might foster prosocial behaviors and social competence (Richters &

Waters, 1991), the research cited above brings this issue into perspective: "Prosocial and antisocial behaviors can often be understood within the context or the relationship in which they occur, and indeed the very first relationships the infant establishes provide the first opportunities for prosocial and antisocial encounters" (Waters et. al., 1986, p. 109). Security of attachment is thus believed to be fostered by prosocial interactions within the parent-child relationship characterized by caring, cooperating, sharing, helping, and coordinated interactions between the child and primary caregiver (Waters et. al., 1986).

It follows from the attachment perspective that children who have formed securely attached relationships develop expectations and perspectives of the self as worthy and that others are also worthy of positive social interactions. These children would be expected to display more socially competent interactions, cooperative behaviors, and be more socially oriented. Feelings about the self which ultimately influence social behaviors are perceived by Bowlby (1973) as emanating from the quality of parent-child relationships.

Researchers in the area of self-concept development have repeatedly suggested that individuals behave in accordance with their perceptions of themselves (Epstein, 1973; Marshall, 1989). Attachment research contributes further to this stance with longitudinal evidence suggesting that perceptions of the self and subsequent social interactions have been greatly influenced by the

quality of earlier parent-child relationships (Bowlby, 1973). This line of research suggests then that a relationship between self-concept and prosocial behavior should appear at an early age.

Social Cognitive Perspective

Research in social cognition (Shantz, 1983) stresses the importance of cognitive structures for self-knowledge and social behaviors. Bretherton (1985) suggested that the representational models of self which are central to attachment theory need to be reconsidered in light of social cognitive research. Social cognition may be defined as the: "conceptions and reasoning about people, the self, relations between people, social groups, roles and rules, and the relations of such conceptions to social behavior" (Shantz, 1982, p. 376). Within this view, relationships between social behavior and cognition are perceived as reciprocal ones in which social behavior gives rise to cognitions (Fisk & Tyler, 1984).

A basic assumption of social cognition is that children's growing perspective-taking skills influence their concepts of self and others (Shantz, 1983; Mecca, Smelser, & Vasconcellos, 1989). The ability to understand and perceive what others are experiencing is viewed as a necessary prerequisite to acting on their behalf (Radke-Yarrow, Zahn-Waxler, & Chapman, 1983). When the child displays prosocial acts of helping and comforting, for example, these acts are considered to have originated from the child's ability to perceive the others'

discomfort and behave in ways that minimize such experiences (Shantz, 1983).

The child's increased level of perspective-taking is not only perceived as giving rise to prosocial behaviors, but also as an influential factor in the development of self-conceptions. With increased perspective-taking skills, children become more aware of how others perceive and react to them, and these perception in turn are incorporated into their self-concepts (Harter, 1983; Small, 1990). It has been suggested (Damon & Hart, 1982) that both the knowledge of the self and the awareness of others' perspectives are discovered simultaneously through the course of interaction among those two forces. Such interactions provide children with opportunities for comparing and differentiating themselves from other children and adults. This position supports the early views of theorists such as Cooley (1964) and Mead (1934) who have proposed that the sense of self develops and is enhanced through the process of social interaction.

As already noted, a prerequisite to prosocial behavior is an increased level of perspective taking, which involves a differentiation between the self and others (Piaget, 1926). The beginnings of a differentiated self concept emerges over the first two years of life as the child begins to separate his/her emotions and actions from those of others within the physical and social environment (Mecca et al., 1989). Hoffman (1988) supported this

position and suggested that the process of self/other differentiation develops by the second year of life with increasing empathic and perspective-taking abilities. He also proposed that differentiation between the self and others is an essential prerequisite to altruistic behaviors (Hoffman, 1988).

Much of the research pertaining to prosocial behavior within the past two decades has focused on the relationship between the child's ability to take the perspectives of others and how this ability may influence prosocial behaviors. Outcomes of such research studies have demonstrated a pattern of possible correlations between the ability to behave prosocially and perspective-taking. Shantz (1983) reported that while there is some evidence of a relationship between social cognitive abilities such as perspective-taking and prosocial behaviors (Buckley, Siegel, & Ness, 1979; Denham, 1986; Strayer & Roberts, 1989; Zahn-Waxler, Radke-Yarrow, & Brady-Smith, 1977), a direct and consistent relationship is far from well established. Accordingly, she suggested that future research needs to explore other mediating factors such as person variables that give rise to individual differences, and examine if such variables mediate prosocial behavior.

In the present study, self-concept was examined for its possible influences on kindergarten children's prosocial behaviors. It has been repeatedly suggested that the self serves as an organizing force that guides behavior, and that individuals behave in accordance with the

way they perceive themselves (Epstein, 1973; James; 1961; Kelly, 1955; Marcus & Wurf, 1987; Marshall, 1989, Pervin, 1984). Unlike the research on the relationship between perspective-taking and prosocial behavior, the amount of research examining the relationship between self-concept and prosocial behavior is limited.

Recent studies have indicated that children with positive self-concepts demonstrate higher frequencies of prosocial behaviors than children with lower or negative self-concepts (Cauley & Tyler, 1989; Larrieu & Mussen, 1985). Such studies provided support for the assumption that the child's self-concept is a personal characteristic that influences his/her social behavior. Although some studies have provided evidence for a possible linkage between self-concept and prosocial behaviors, very little is still known. Additional research such as the present one may provide further insight into the relationship between self-concept and prosocial behavior.

The purpose of the present study was to investigate the relationship between self-concept and kindergarten children's prosocial behaviors. More specifically, this investigation examined the relations between three aspects of self-concept (physical, personal, social) as they related to four types of spontaneous and requested prosocial behaviors (helping, sharing, comforting, cooperating). The possible influence of gender on prosocial behavior was also explored.

Significance of the Study

A possible relation between self-concept and educational variables such as academic achievement has been explored (e.g. Bachman & O'Malley, 1986; Carroll, Friedrich, & Hund, 1984; Dobson, Campbell, & Dobson, 1982; Larned & Muller, 1979). Similarly , prosocial behavior has been linked to other arenas of social interaction, such as perspective-taking and empathy (e.g. Buckley, Siegel, & Ness, 1979; Denham, 1986; Iannotti, 1985; Zahn-Waxler, Radke-Yarrow, & Brady-Smith, 1977). However, a possible relation between prosocial behavior and self-concept has not been adequately examined.

This study investigated self-concept for its possible influences on children's spontaneous and requested helping, sharing, comforting, and cooperating prosocial behaviors. Various researchers have suggested that individuals behave in accordance with their perceptions of themselves (Marshall, 1989; Pervin, 1984). Children and adults who perceive themselves positively are more likely to exhibit positive behaviors toward others in the course of their social encounters (Cauley & Tyler, 1989; Trimakas & Nicoley, 1974; Laurrie & Mussen, 1985). On the other hand, individuals who perceive themselves in a negative manner have the tendency to interact more negatively with others, and in extreme cases demonstrate signs of delinquency (Meadow, Abramowitz, Cruz, & Bay, 1981).

Investigators concerned with the frequencies of positive social interactions such as helping, sharing, comforting, and cooperating among children frequently examine two types of immediate antecedent events proceeding such behaviors. Prosocial behaviors occur spontaneously or are requested by others. Spontaneous prosocial behaviors are positive actions displayed by children in the absence of verbal or nonverbal requests from others (Eisenberg, Cameron, Tryon, & Dodez, 1981). Requested prosocial behaviors, on the other hand, are positive actions displayed by children in response to verbal or nonverbal requests from others (Eisenberg et al., 1981. Various factors such as positive mood, level of sensitivity, independence, in addition to the age and gender of a child have been investigated for their possible effects on the quality of prosocial behaviors. The pattern of results from such studies (Eisenberg, Cameron, Tryon, & Dodez, 1981; Eisenberg-Berg & Hand, 1979; Iannotti, 1985; Lennon & Eisenberg, 1987) indicated that children who displayed relatively many spontaneous prosocial behaviors, as opposed to requested ones, were generally more independent, initiated social contacts, and exhibited high levels of positive affect and sensitivity. In the present study, possible relations between the quality of children's self-concepts and the frequencies of spontaneous and requested prosocial behaviors were examined.

Results from a limited number of studies have indicated positive relations between prosocial behavior and self-concept (Cauley &

Tyler, 1989, Laurrieu & Mussen, 1985). The present study also investigated these relations. Since prosocial behaviors are generally desirable modes of social expression, research in this area needs to expand and include those variables such as self-concept to investigate for a possible linkage. Such research may allow those involved with young children to focus on enhancing and motivating those personal characteristics such as self-concept that may lead to desirable outcomes displayed in the form of prosocial behaviors.

Definition of Terms

A. Prosocial behaviors: any voluntary actions that are intended to benefit another individual or group of individuals without the expectation of an external reward (Eisenberg & Mussen, 1989).

1. Helping behaviors: verbal and physical actions that assist another individual through providing information, requesting assistance from another child or adult, or by behaving in a manner that facilitates the ongoing activity of another child (Iannotti, 1985). Includes one child's attempt to alleviate another child's nonemotional needs (Eisenberg-Berg & Lennon, 1980).

2. Sharing behaviors: offering an object or part of an object in the child's possession to another child or group of children (Iannotti, 1985).

3. Comforting behaviors: verbal and physical actions intended to console a distressed child by offering physical or emotional

comfort, or asking an adult to attend to the distressed child (Iannotti, 1985). Includes one child's attempt to alleviate another child's distress (Eisenberg-Berg & Lennon, 1980).

4. Cooperating Behaviors: involve at least two children playing in close physical proximity engaged in a mutual tasks. Includes formal games, role-taking play, organized activities (Serbin, Tonick, & Sterglanz, 1977; Iannotti, 1985).

B. Self-Concept: the knowledge that children have of themselves as physical, social, and moral beings (Bhatti, Derezates, Kim, & Specht, 1989). It is also viewed as the dynamic interpretive structure that mediates the most significant intrapersonal processes and a wide range of interpersonal processes (Marcus & Wurf, 1987).

1. Physical self-concept: includes the awareness of physical abilities and appearance (Shavelson, Hubner, & Stanton, 1976).

2. Social self-concept: includes the awareness of interpersonal skills and abilities as perceived by significant others such as parents and peers (Shavelson, et al., 1976).

3. Personal self-concept: the awareness of personal cognitive, emotional, and independence skills and abilities.

4. Positive/high self-concept: the child perceives himself/herself as capable, important, and is able to function at the normal or superior levels (Quandt & Selznick, 1985).

5. Negative/low self-concept: the child perceives himself/herself as incapable and unimportant to an extent that his/her normal performance is limited (Quandt & Selznick, 1985).

Research Questions

The purpose of this investigation was to explore the relations between the self-concepts of kindergarten children and their prosocial behaviors defined as helping, sharing, comforting, amd cooperating within the school setting. The quality of the prosocial antecedents defined as spontaneous and requested behaviors as well as gender differences were also examined. Due to the exploratory nature of this problem, questions rather than hypotheses have been delineated.

Question # 1: What is the relation between the prosocial behavior of kindergarten children and their self concept?

Question # 2: What is the relation between spontaneous and requested prosocial behaviors and self-concept?

Question # 3: What are the relations between spontaneous and requested prosocial behaviors and physical, social, and personal self-concepts?

Question # 4: Are there gender differences in children's prosocial acts of helping, sharing, comforting, and cooperating?

CHAPTER 2

LITERATURE REVIEW

Prosocial Behavior and Self-Concept

Children's prosocial behaviors and their self-concepts have been studied separately with little attention given to a possible linkage. The limited number of studies that have examined these relationships, however, provide support for the assumption that individuals behave in accordance with their self-perceptions (Cauley & Tyler, 1989; Larrieu & Mussen, 1985). In the following review, theoretical perspectives and developmental issues in prosocial behavior and self-concept, as well as the influence of family and child rearing practices, and classroom and educational factors will be addressed. A final section presents a review of the relevant studies on prosocial behavior and self-concept.

Prosocial Behavior

Definition

Prosocial behaviors are defined as any voluntary actions that are intended to benefit another individual or group of individuals without the expectation of an external reward (Eisenberg & Mussen, 1989). During the preschool years, children engage in behaviors that are intended to help, comfort, defend, and protect others. Children are also capable of sharing, donating, and cooperating with their peers as well as adults (Marion, 1987). Researchers often distinguish between two types of prosocial behaviors that involve either spontaneous or

requested actions. Spontaneous helping and sharing prosocial behaviors, for example, are those actions exhibited by children in the absence of verbal and/or non verbal requests from others (Eisenberg, Cameron, Tryon, & Dodez, 1981). On the other hand, positive actions exhibited by children in response to verbal and/or non verbal requests from other children or adults are considered to be requested prosocial behaviors (Eisenberg, Cameron, Tryon, & Dodez, 1981).

Developmental and Age Related Issues

Prosocial behavior: Changes related to age. The onset of the development of prosocial behavior has been a debated issue among researchers for years. It was generally assumed that children's ability to behave prosocially surfaced around the age of four or five. Recent evidence, however, contradicts this assumption. Howes and Farver (1987) for example, studied a group of toddlers in an attempt to determine if these very young children are able to respond empathically and prosocially to a distressed other. It was suggested by the results of their study that the observed toddlers responded to their peers' distress by actively mediating peer disputes as well as consoling the crying child through physical contact.

Bar-Tal, Raviv, and Goldberg (1982) also reported that children as young as twenty months showed evidence of prosocial behaviors, specifically helping acts. They concluded that these positive actions were exhibited by the young children without the promise of an external reward. When the issue of the frequency of such behaviors

was raised, however, researchers such as Lipscomb, McAllister, and Bregman (1985) concluded that older children tend to demonstrate more prosocial behaviors than younger children. Lipscomb's et al. findings (1985) were supported by Zarbanaty, Hartman, and Gelfand (1985), who also reported that older children demonstrated more positive actions such as generosity as compared to the younger children in their sample.

Other researchers have supported the idea that a change in prosocial behavior does occur with age and that this change is both qualitative and quantitative in nature. Pearl (1985) suggested that with increasing age, children become better able to conceptualize the various situations in which help is needed and to identify problems as well as determine the manner in which help is administered. It becomes clear then that prosocial behavior increases with age and that the motivations for such behaviors also change as the child matures (Eisenberg &Mussen, 1989).

Prosocial behavior and perspective taking. Cognitive developmental theorists such as Piaget have attributed the development of prosocial behaviors in young children to decreasing levels of egocentrism (Buckley, Siegel, & Ness, 1979). According to Piaget, egocentric children interpret the environment through their preoperational skills that allow them to assume that others perceive the world as they do (Bjorklund, 1989).

The child's egocentrism is essentially a phenomenon of

> indifferentiation, i.e., a confusion of his own point of view with that of others or of the activity of things and persons with his own activity. Defined thus, it is both suggestibility and unconscious projection of the ego into the group, and lack of awareness of the point of view of others and unconscious absorption of the group into the ego. In both cases it is essentially unconscious, precisely because it is the expression of a failure to differentiate (Piaget, 1962, pp. 73-74).

Piaget believed that an increased level of perspective-taking and differentiation abilities develop gradually during the early childhood years (Bjorklund, 1989). With increasing cognitive developmental skills, the child's ability to engage in positive social behaviors surfaces (Piaget & Inhendler, 1969). Piaget's position on the interaction between children's cognitive abilities and their social environments in influencing behavioral outcomes has provided the basis for the social cognitive perspective.

The main supposition of social cognition is that social knowledge is constructed through social interaction (Small, 1990). Accordingly, children's positive social behaviors are related to how they cognitively comprehend their social environment. In 1975, Shantz suggested that a wide range of children's prosocial behaviors emerge and are strengthened by their perspective-taking abilities and the process of differentiation between the self and others. Subsequently, a number of researchers conducted studies with young children to

investigate the relations between perspective taking and prosocial behaviors (e.g. Buckley, Siegel, & Ness, 1979; Denham, 1986; Iannotti, 1985; Zahn-Waxler, Radke-Yarrow, & Brady-Smith, 1977).

In their study with children ranging in age from three to seven, Zahn-Waxler et al. (1977) found no significant correlations between the various measures of perspective taking and prosocial behaviors for the older children in their sample. When the total score on the perspective taking tasks were summed for the younger children in their sample, a positive correlation was found between perspective taking and prosocial behavior. As a result, the authors concluded that perspective-taking abilities are present earlier in life than had been previously hypothesized. They also added, however, that prosocial behaviors cannot be predicted from the child's perspective taking ability.

Buckley et al. (1979) conducted a similar study with three to eight year old children. A major difference between their study and that of Zahn-Waxler was the focus on interactions among the children rather than between children and adults. Buckley et al. concluded that children who displayed prosocial behaviors had significantly higher scores on empathy and perspective taking tasks. It was concluded that altruism seemed to be influenced by these significant cognitive components.

Denham (1986) used three different measures to investigate young children's perspective-taking abilities and their relation to prosocial

behavior. Each subject's emotional responses to an adult or a child were observed in free-play settings and were also assessed in semistructured situations. The most structured task consisted of a measure that involved both affective and cognitive perspective-taking, as well as affective labeling. Denham found that children responded in different prosocial ways to different emotions. In addition, children's understanding of emotions were found to be significantly related to prosocial behavior. Denham concluded that two and three year old children showed nonegocentric and cognitive perspective-taking abilities at a greater than chance level. Iannotti (1985) assessed children's prosocial behaviors through classroom observations, and their perspective-taking abilities were assessed using structured measures of perspective-taking and prosocial behavior. Iannotti found that some children were sensitive to the needs of others and this sensitivity was apparent in their social interactions. The absence of a consistent relationship between prosocial behavior and perspective-taking, however, implied that the understanding of others' views and needs did not necessarily assure prosocial responding.

Prosocial behavior and empathy. After examining various research studies on the development of empathy, Damon (1988) concluded that highly empathic children tend to engage less in aggressive antisocial behaviors than children with lower empathic abilities. These same children not only exhibited minimal amounts of antisocial behaviors

but also tended to be more prosocial in their interactions with peers (Damon, 1988). Iannotti (1978) examined the effect of role-taking training on empathy and prosocial behavior. When children were exposed to role-taking training procedures, prosocial behaviors increased.

Studies with older children provide similar results. Barnett and Thompson (1985) investigated the role that perspective-taking and empathy play in children's prosocial behavior and motives for helping. Their sample consisted of fourth and fifth grade children who were evaluated as "low" or "high" on tests of empathy and perspective-taking. Highly empathic children were rated by their teachers as more helpful than less empathic children. Highly empathic children were also more likely to attribute their helpful behaviors to the awareness that others needed their help.

Family and Child Rearing Factors

The child's family, especially in the early years of life, is perceived as the major socialization agent through which children learn various modes of social expression. Early childhood experiences within the family environment are perceived as having profound and lasting social and emotional influences (Radke-Yarrow & Zahn-Waxler, 1986). Parents generally influence their children's behaviors by promoting and reinforcing positive interactions such as generosity and sharing, while punishing selfish and uncooperative behaviors (Eisenberg & Mussen, 1989). It has been argued that the quality of the

parent-child relationship ultimately influences the child's positive or negative social tendencies. Eron and Huesmann (1984), for example, suggest that if children do not learn prosocial behaviors at an early age, they are more likely to mature into adults who engage in antisocial behaviors.

It is generally assumed that children exposed to a warm and nurturing home environment with vast opportunities for altruistic exchange develop the ability to become more prosocial in their interpersonal interactions (Eisenberg & Mussen, 1989). In contrast, children who experience harsh and abusive treatment by parents during the early years will more likely develop a repertoire of behaviors that excludes prosocial actions (Eisenberg & Mussen, 1989). Furthermore, traits and behaviors that are learned early in life are believed to persist into the adult years. Eron and Huesmann (1984) reported that children who are continuously exposed to ridicule, punishment, and feelings of shame during the early years of life are more likely to become aggressive individuals as adults.

The relationship between the quality of early care and its influences on children's later social emotional functioning is central to attachment theory as originally formulated by John Bowlby (1973). The assumption is that socially competent children who display cooperative behaviors and engage in positive peer interactions have been exposed to warm and empathic early relationships with the primary caregivers (Cohn, 1990). Socially incompetent children, on

the other hand, are believed to have experienced inconsistent and disruptive early care (Bretherton, 1985).

Bowlby (1973) proposed that carryover effects from early parent-child relationships to later social emotional competent development are influenced by "internal working models", delineating views about the self, primary caregivers, and others in the social environment. These working models, in turn, develop and are influenced by the quality of care the child received during the first two years of life. Children whose mothers exhibit consistent, warm, empathic caregiving incorporate these positive behaviors into their mental working models. Consequently, these children are more likely to approach peers and social experiences with a set of positive expectations (Cohn, 1990).

Evidence of continuity between the quality and security of early parent-child relationships and later social competence has been provided by several research studies. Pastor (1981) reported that individual differences were observed among children's social interactions, and attributed these differences to the quality of early relationships. Positive social characteristics favored the children in their sample who were classified as having experienced consistent, supportive, and responsive early care. Pastor (1981) also reported that those children were more friendly, sociable, and related to peers more cooperatively than children from insecure early relationships. Further support for the quality of early relationships as predictors of

later social functioning was provided by Matas, Arend, and Sroufe (1978). They reported that children from secure early relationships engaged in greater amounts of symbolic play, were more enthusiastic and compliant, experienced more positive affect, and displayed persistence in tool using tasks.

It has also been reported that mother's and children's altruistic and prosocial tendencies are related. Zahn-Waxler, Radke-Yarrow, and King (1979) found that mothers who practiced empathic caregiving positively influenced their child's own altruistic responses toward others. Strayer and Roberts (1989) reported on the positive relationship between the level of mothers' empathy, and the frequencies of children's prosocial behaviors within the school setting as evaluated by teachers.

Sparks, Thornburg, Ispa, and Gray (1984) also investigated the parental factors that are assumed to influence the development of children's prosocial behaviors. They studied the impact of various parental levels of control and how they influence the development of prosocial behaviors. They found that parents who imposed high levels of control over their offspring's behaviors were more likely to have children who exhibited limited amounts of prosocial actions. The researchers concluded that larger sample is needed in order to to make generalizable statements about the level of control and how it may affect children's behavior.

It has also been suggested that some parents actually impose limits on their children's prosocial behaviors. For example, Peterson, Reaven, and Homer (1984) looked at the criteria parents used to evaluate situations which required a prosocial behavior on the part of their child. The parents in this study (Peterson, et al., 1984) were provided with questionnaires aimed at synthesizing their views of their child's positive behaviors. The results of their study revealed that parents were selective in their judgments and did not universally advocate prosocial behaviors for their children in all situations. Rather, it was implied that parents were not in favor of their child behaving prosocially if this behavior resulted in a situational cost (i.e. giving up a toy).

Parents thus have both a direct and an indirect influence on their children's social interactions. Interactions among siblings have also been studied. Sibling relationships: "provide rich opportunities for learning patterns of loyalty, helpfulness, and consideration, as well as conflict, domination, and competition. Siblings can teach, reinforce, or punish each other's responses" (Eisenberg & Mussen, 1989, p. 91).

In 1986, Dunn and Munn investigated family composition and in particular, the effect that siblings have on each others' prosocial behavior. It was suggested by their findings that children who grow up with cooperative siblings are positively influenced by the quality

of the behaviors exhibited and are therefore more likely to themselves become more cooperative.

Number of siblings, gender and other individual differences may influence the development of prosocial behaviors. For example, Rehberg and Richman (1989) investigated the interaction of race, gender, and family composition on children's positive behaviors. They found that children from smaller families exhibited more positive behaviors, such as comforting, than children from larger families. In addition, male children from father-absent homes were also found to have the highest scores for comforting behaviors. It may be possible to conclude from these studies that children's prosocial behaviors can be influenced by the quality of early care, as well as the quality of interactions among siblings.

Classroom Factors Influencing Prosocial Behaviors

Regardless of the various socialization practices that occur within the child's home, some researchers believe that prosocial behavior can actually be promoted and maintained in school settings by way of peer interaction, teacher modeling, and instruction.

In 1989, Eisenberg & Mussen suggested that peers pose a powerful influence on each others' positive and negative behaviors. Such behaviors are influenced by various socialization processes including reinforcement, punishment, modeling, and imitation (Bower & Hilgard, 1981). This assumption was supported by a study with results

indicating that the quality of relations among peers was found to influence the quantity of positive behaviors exhibited (Berndt, 1981).

Although it has been documented that preschool children have the ability and sensitivity to respond to their peers in various positive ways (Iannotti, 1985), these responses were generally believed to be affected by the quality of peer relations. It was found by Eisenberg, Lundy, Shell, and Roth (1985) that children justify their prosocial actions toward others based on the perceived quality of the relationship. Accordingly, they found that children responded more often to peers considered as friends as opposed to acquaintances. This assumption was also supported by Berndt's study (1981). Another study investigating prosocial behaviors among peers found that although these actions occurred with low frequency, they nevertheless were demonstrated by most children. (Radke-Yarrow, Zahn-Waxler, Barrett, Darby, King, Pickett, & Smith, 1976).

Peer reporting of prosocial behaviors within the classroom setting has also been perceived as an additional factor that contributes to the enhancement of such behaviors. Grieger, Kauffman, and Grieger (1976) exposed a group of kindergarten children to a condition requiring them to report on the cooperative behaviors demonstrated by their peers. It was suggested that as a result of such conditions, the amount of aggression among the children was reduced while cooperative play increased among the peers.

Within the context of larger studies, peer nominations were at times used as additional measures in identifying a variety of children's behavioral characteristics including prosocial behaviors. Eisenberg, Cameron, Pasternack, and Tryon (1988), for example, indirectly assessed children's prosocial behaviors through peer ratings. Their subjects were middle class preschool children whose naturally occurring classroom prosocial behaviors were observed. Children were individually interviewed and asked to nominate their peers who they believed helped others and those who shared their toys with other children. The results of this study indicated that peer nominations of helping correlated positively and significantly with observed requested helping. There was no relationship, however, between peer nominations of sharing and the observed frequencies of sharing behaviors.

The peer group is only one aspect of early childhood settings that is considered as a factor that influences behavior. Teachers or caregivers are also perceived as powerful agents of socialization with the ability to promote and enhance children's prosocial behaviors.

In the course of their interactions with the youngsters, nursery school teachers frequently give explicit instructions about helping, sharing, and consideration; they can instigate these behaviors, and reward them when they occur. Furthermore, they inevitably serve as models of nurturance, consideration, and

kindness, eliciting imitative prosocial responses (Eisenberg & Mussen, 1989, p. 97).

Doescher and Sugawara (1989) supported this position by reporting that children who are continuously exposed to teachers who model prosocial behaviors such as helping and sharing were found to exhibit higher levels of positive actions.

Gelfand, Hartman, Cromer, Smith, and Page (1975) investigated the assumption that specific instruction plays a role in promoting prosocial behaviors. Their sample consisted of children who displayed low baseline rates of donating behaviors. To increase these behaviors, the investigators exposed the children to instructional prompts and praise. Gelfand et al. (1975) found a significant increase in the donating behaviors of these children and attributed this increase to their prompting and praise techniques.

A similar study (Eisenberg-Berg, Haake, Hand, & Sadalla, 1979) investigated the effects of instruction about toy ownership on preschoolers' sharing and defensive behaviors. As with Gelfand's et al. study (1975), it was found that children who were exposed to specific prosocial instruction displayed more sharing behaviors as compared to the children in the non-instruction condition.

Spontaneous and Requested Prosocial Behaviors

When researchers investigate the various factors pertaining to the emergence of observed prosocial behaviors, an added dimension that includes identifying antecedents of these behaviors is often

considered. More specifically, spontaneous and requested or asked-for prosocial behaviors are assessed within the context of the larger study.

Spontaneous and requested prosocial behaviors are generally perceived as influenced by several mediating factors such as the child's affective state, empathic abilities, and gender. Lennon and Eisenberg (1987) found that spontaneous prosocial actions were associated with high levels of positive affect. Children in positive moods tended to exhibit more spontaneous prosocial behaviors compared to their peers experiencing less positive moods. Moreover, sensitivity to the needs of others was found to be positively related to spontaneous prosocial behaviors among the children (Iannotti, 1985).

Evidence concerning gender differences in the expression of spontaneous prosocial behaviors has yielded contradictory findings. In 1985, Cameron, Eisenberg, and Tryon found that the boys in their sample exhibited significantly higher levels of spontaneous positive behaviors when compared to the girls in the same sample. In another study however, Eisenberg-Berg and Lennon (1980) found that girls scored higher on the total spontaneous prosocial categories as compared to boys.

In 1981, Eisenberg, Cameron, Tryon, and Dodez reported that children who often displayed relatively numerous spontaneous prosocial behaviors were generally observed as having many social

contacts with peers, were more independent, and responded more positively to others' prosocial behaviors. In contrast, children who performed higher levels of requested prosocial behaviors were found to be more dependent, less likely to elicit positive reactions from peers, and were unlikely to respond positively to peer initiated prosocial behaviors. In addition, the authors also reported on teacher responses to prosocial behaviors. They found that for the most part, teachers did not respond positively to children's prosocial actions. When they did respond, however, these reactions were directed toward the girls' spontaneous behaviors as opposed to prosocial behaviors displayed in response to a request. The prosocial behaviors of the boys in the sample never elicited any response from the teacher.

Eisenberg, Pasternack, Cameron, and Tryon (1984) studied a sample of four year old children and coded their attributions about their spontaneous and requested prosocial behaviors as well as their moral judgments. They used seven categories, which included hedonistic, pragmatic, and needs-of-others orientations. It was found that children who exhibited spontaneous positive behaviors such as helping held a pragmatic view (justifying behavior with practical nonmoral reasoning) of their actions.

The same sample of children was also observed using spontaneous helping behaviors as an initiation point for establishing social contacts. More specifically, while both spontaneous helping and

sharing were related to sociability with peers, only spontaneous helping was positively related to sociability with teachers. Eisenberg et al. (1984) concluded that children who demonstrated relatively many prosocial behaviors differed from other children with respect to their social interactions and the inferences they made about their behaviors.

Gender Differences in Prosocial Behavior

Several cultural expectations lead people to predict that gender differences in prosocial behaviors among children do exist. Among these expectations are the pressures imposed on boys to be competitive, nonemotional, and assertive, while girls are expected to meet the emotional needs of others, be sensitive, empathic, compliant, and subjective (Radke-Yarrow, Zahn-Waxler, & Chapman, 1983). It is reported, however, that there is no consistent evidence indicating gender differences in prosocial responses (Eisenberg & Mussen, 1989; Honig, 1982). When differences are reported, however, they seem to be in favor of girls (Eisenberg & Mussen, 1989) and only under certain circumstances, such as the presence of a model.

Self Concept

Definitions and Theoretical Perspectives

Theorists and researchers have attempted as early as the turn of the century to define the various dimensions that constitute the self, as well as define the various factors that contribute to its development. Researchers reviewing studies concerning self-concept

often conclude that one of the major difficulties in conducting such studies lies in the inability to locate precise definitions (Pervin, 1984). Accordingly, it has been repeatedly stated that definitions of self-concept vary from one study to the next (Shavelson, Hubner, & Stanton, 1976; Silvernail, 1985).

Among the first psychologists who wrote extensively on the 'self' was William James. In 1910, James defined the self as consisting of three major components that includes the material, social, and spiritual selves which are all capable of evoking a heightened or lowered state of self-esteem (Epstein, 1973). "James, apparently, viewed the self as having a unity as well as being differentiated, and as being ultimately associated with emotions as mediated through self-esteem" (Epstein, 1973, p.405).

Other theorists have added an additional component to the definition of the self which involves the perceptions of others. This component is expressed in Cooley's concept of the "looking-glass self". In 1902, Cooley proposed that the self-concept, or the perceived self, is derived from and largely influenced by the individual's perceptions of how others perceive him/her (Cooley, 1964). Similarly, George Mead (1934) adopted this view but contributed further by adding that there are as many selves as there are social roles, while heavily emphasizing the role of social exchange (Epstein, 1973).

Carl Rogers was also among the theorists who contributed his own definition of the self-concept. In 1951, Rogers proposed that,

> The self-concept, or self-structure, may be thought of as an organized configuration of perceptions of the self which are admissible to awareness. It is composed of such elements as the perceptions of one's characteristics and abilities; the percepts and concepts of the self in relation to others and to the environment; the value qualities which are perceived as associated with experiences and objects; and goals and ideals which are perceived as having positive or negative valence (Rogers,1951, p. 137).

According to Rogers' self theory, the quality of an individual's self-concept contributes to his or her general state of adjustment (Piers & Harris, 1984). He also stated that the self-concept consists only of the individual's personal characteristics that are in the realm of his/her awareness and control (Epstein, 1974).

According to Erikson's theory of psychosocial development, "identity", or the concept of the self is viewed as, "the individual's central awareness of being a sensory and thinking creature endowed with language, who can confront a self (composed, in fact, of a number of selves), and can construct a concept of an unconscious ego" (Erikson, 1982, p. 85). Moreover, what other theorists have labelled as self-concept, self-system, or self-experience, Erikson chose to label as "identity" which covers much of what has been referred to as

the "self" (Erikson, 1980). Erikson proposed that an individual's "identity" or concept of the self is shaped by two major forces. Both, the biological abilities of the individual and the environment to which he/she is exposed, function as interacting forces working interdependently and ultimately contributing to the individual's continuous development through space and time according to a predetermined 'life plan' (Erikson, 1950).

From the early years of childhood until adulthood is attained, individuals are confronted with a series of developmental tasks that contribute to the quality and well-being of the self. These tasks or "crises" coincide with the various stages of psychosocial development which Erikson labels as the "Eight Ages of Man" (Erikson, 1950). Development, according to Erikson, proceeds as the self resolves the "crisis" that appear from opposing forces (Miller, 1989). Under these circumstances, movement through these "psychosocial crisis" depend upon the resolution of each of the "crises" that surfaced within the previous stages (Erikson, 1950). "Identity" or the concept of the self is thus influenced by the resolution of the "crisis" within each stage of development, with early forms of resolutions affecting the soundness of later resolutions and psychosocial development (Miller, 1989).

It is important to realize that in the sequence of his most personal, "experiences the healthy child, given a reasonable amount of guidance, can be trusted to obey inner laws of development, laws

which create a succession of potentialities for significant interaction with those who tend him" (Erikson, 1980, p. 54). From this and similar statements presented by Erikson, it may be concluded that the manner in which children come to perceive and understand themselves and their personal abilities, influences the way they interact with other children and adults whom they come in contact with.

More recently, researchers have continued to further contribute to the definition of the self. In 1980, Beane, Lipka, and Ludewig defined self-concept as the descriptions individuals have of themselves that are in turn influenced by the various social roles as well as the personal characteristics of those individuals. Similarly, Marsh and Shavelson (1985) defined self-concept as a person's perceptions of him or herself. They added that these perceptions are influenced by the experiences and interpretation of one's environment, with evaluations of significant others and reinforcements viewed as affecting the behavioral outcomes of individuals.

Another variation of the definition was provided by Marcus and Wurf (1987) who view the self-concept as a, "dynamic interpretive structure that mediates the most significant intrapersonal processes (including information processing, affect, and motivation) and a wide range of interpersonal processes (including social perception; choice of situation, partner, and interaction strategy; and reaction to feedback) (Marcus & Wurf, 1987, p. 300).

For the purpose of this study, self-concept is defined as an individual's perceptions and awareness of his/her personal characteristics and abilities which include the physical, social, and personal realms of awareness. It also includes the beliefs that individuals hold concerning the totality of their abilities and experiences.

After reviewing the literature on self-concept, Alawiye and Alawiye (1984) proposed that the development of the self has been explained by two major theories. The first of the two theories is labelled by psychologists, psychiatrists, and ontologists as the "developmental self". In their view, the development of self-concept is heavily influenced by the individual's biological growth. The environment, however, is also viewed as playing a role characterized by unfolding the development of the self through the continuous interaction between itself and the individual.

Alawiye and Alawiye (1984) also referred to a second school of thought which includes environmentalists who are further subdivided into behaviorists and phenomenologists. This "social self" group attributes the development of the self-concept primarily to the process of interaction between the self and the environment. Therefore, the self is perceived as a learned reaction to external influences. These forces in turn are viewed as influencing the development of the concept through one's perceptions of how others respond to him or her (Alawiye & Alawiye, 1984).

Methodological Issues

The self-concept has been posited as a personal characteristic that accounts for and explains overt behaviors across a wide spectrum of situations (Marsh & Shavelson, 1985). In addition, the attainment of a positive self-concept has been a goal in the field of personality and child development, in clinical treatment, and in education (Marsh & Shavelson, 1985). The enhancement of positive self-concepts is valued as desirable outcomes that generally lead to desirable behavioral changes (Marsh & Governet, 1989).

Since the introduction of the self-concept by William James in 1890 (Pervin, 1984), however, conceptual and methodological problems have hampered progress in understanding the various factors that contribute to the development of the self (Marshall, 1989). These concerns are exaggerated at the early childhood level. Marshall (1989) reported that very few self-concept instruments are suitable for children under the age of eight due to the children's limited abilities to verbalize and understand the various abstractions that are essential to describing the self.

The definition of self-concept has varied from one researcher to the next adding to the lack of clarity and precision regarding the construct (Hughes, 1984). Hughes (1984) proposed that the development of adequate measurement instruments has been hindered by this lack of clarity and precision in the definitions of self-concept. The use of different definitions by various researchers as

well as different dimensions of self-concept (Marshall, 1989) has made comparing and synthesizing information from various studies a difficult process (Shavelson, Hubner, & Stanton, 1976). In addition to varying definitions, self-concept research has suffered from poor quality instruments that may contribute to weakening the links between theory, empirical research, and practice (Marsh & Holmes, 1990; Marsh & Shavelson, 1985).

Shavelson et al. (1976) added another dimension that further contributed to the already accumulating difficulties in self-concept research. They proposed that in addition to difficulties in defining the self as well as the instruments measuring it, individuals may be unwilling to report on their self-concepts and/or report responses they perceive as socially desirable. The inadequate theoretical models, the wide array of instruments and self-concept definitions were issues addressed by Shavelson et al. (1976) in an attempt to remedy the shortcomings of research in this area (Marsh & Governet, 1989).

Shavelson et al. (1976) posited a hierarchical multidimensional model of self-concept. The multidimensionality of the self reflects a categorical system that includes various factors perceived to influence the self-concept. These factors are the school environment, the level of social acceptance, physical attractiveness, and general ability. The concept of the self was posited by Shavelson et al. as hierarchical. For example, academic and nonacademic self-concepts

constitute the major components of the general self-concept. The academic self-concept was divided into specific content areas such as English and Mathematics. In addition, the nonacademic self-concept was further divided into social, emotional, and physical self-concepts, with each of these components consisting of further subdivisions (Shavelson, et al., 1976).

Self-concept was also proposed as generally stable and evaluative (Shavelson, et al., 1976). It is believed that the individual's core perceptions develop during the early childhood years and are subjected to minimal change through time. When change does occur, however, it is believed to be influenced by the evaluative nature of the self-concept. In essence, not only do descriptions of the self develop over time, but these descriptions are also evaluated by the individual in various situations (Shavelson, et al., 1976).

At the time that Shavelson et al. posited their multidimensional hierarchical model of the self-concept, there was limited empirical support for it because researchers had emphasized global measures (Marsh & Holmes, 1990). Current measures, however, such as that of Harter and Pike (1984) have been constructed with Shavelson et al.'s model as a base. A recent study by Bullock and Pennington (1988) utilized Harter and Pikes' (1984) Pictorial Scale of Perceived Competence and Social Acceptance for Young Children. They correlated children's cognitive and physical competences and peer acceptance with a variety of different variables. The results of this

study suggested that certain forms of children's competences are related to parental cohesion, expressiveness, conflict, acceptance, and SES.

Developmental and Age Related Issues

The development of the self-concept is a continuous process that begins shortly after birth and is acquired throughout infancy, childhood, and persists into the years of adulthood (Phillips, 1983). Although self development begins at birth, the newborn is not yet capable of perceiving the self as a separate entity (Silvernail, 1985). Through the continuous interaction with the environment, however, the infant gradually acquires a baseline ability for separateness, allowing for the occurrence of the simplest forms of differentiation between the self and others (Silvernail, 1985).

The ability of infants to differentiate between the self and the other, as well as demonstrate self understanding, has generally been investigated through tests of self-recognition. These tests include showing infants images of themselves through pictures, mirrors, or other visual media (Damon & Hart, 1982). Through observing the infants' reactions to their own images, researchers have managed to gain a better understanding of the onset of the differentiation process. As a result, it has been documented that self-understanding and recognition is demonstrated as early as nine months of age (Damon & Hart, 1982).

It has also been documented that the degree to which the child is able to differentiate between the self and others influences the child's ability to behave prosocially (Johnson, 1982). Johnson reported that by the age of two, children demonstrate the ability to behave prosocially through their increased sensitivity and awareness of others. The study also suggested that a child's ability to comfort and help others is closely associated with the level of self-other differentiation (Johnson, 1982).

As children develop into the preschool years, their self-concepts are enhanced by the decentering process that allows them to perceive differences between themselves and others (McFarland, 1984). In addition, and with increasing age, children's self-concepts become less concrete and more abstract. For example, the younger subjects in Montemayor and Eisen's study (1977) described themselves in terms of concrete and objective categories such as their personal possessions, play activities, physical appearance, and their address. The older subjects, however, provided more abstract and subjective descriptions of themselves which included personal beliefs, interpersonal, and motivational characteristics. Developmental differences in the way children perceive other persons has also been documented. Research in the field of social cognitive development emphasizes that the differentiation process contributes to changes in the child's developing "person perception" skills. During the early childhood years, children perceive and describe others in concrete and

global ways by referring to physical appearance and material possessions (Shantz, 1983). In contrast to younger children, the older child is able to perceive and describe others as individuals with particular sets of beliefs and values (Shantz, 1983).

Accordingly, children begin to behave consistently with the way they conceptualize themselves. This self conception in turn influences the way they interact with others and the manner in which novel situations are approached and dealt with (Marshall, 1989). As children begin to differentiate more, they come to realize and understand that the same behaviors are not necessarily socially acceptable in all situations (Marshall, 1989).

Family and Child Rearing Influences

It is generally agreed upon that parents contribute significantly to the development of the young child's self-concept (Phillips, 1983). When the child's parents provide an environment that supports and stimulates his/her normal course of development, accompanied by genuine love and care, the child's self-concept is likely to be psychologically sound, healthy, and stable (Silvernail, 1985). Effective early parenting has also been perceived as one of the factors that contributes to the soundness of the child's self-concept and self-esteem as an adult. Sears (1970) investigated the relationship between the quality of early parental care and children's self-concept, and found that accepting and warm parents were more likely to have children with positive self-concepts and self-esteem.

Bowlby (1973) explained that such relationships can be attributed to the responsiveness and availability of the primary caregiver and the quality of early care that ultimately influences the child's later social competences and how the self is viewed.

Bowlby (1973) explained that conceptions about the worthiness of the self are influenced by the quality of the parent-child attachment bond that develops mainly during the first two years of the child's life. The "internal working models" that are formed during early encounters serve as representational systems that guide expectations of others and of the self (Richters & Waters, 1991). Bowlby (1973) suggested that these models have a profound effect on how the child later views the quality of the self.

Acquiring a positive sense of self is greatly influenced by the type of care children encounter during infancy. Children with positive self-conceptions are assumed to have formulated mental models of their mothers as responsive, available, and helpful and accordingly develop complementary models of themselves as valuable individuals (Bowlby, 1973; Erickson, Sroufe, & Egeland, 1985). These children who have experienced positive early interactions with their mothers are expected to develop positive self-esteem and approach situations and new experiences with confidence (Bowlby, 1973; Erickson et. al, 1985; & Sroufe & Waters, 1977).

Through parents' appraisals, positive reinforcements, and effective discipline techniques, young children learn about their

personal qualities and abilities (Phillips, 1983). Moreover, positive self-concepts are enhanced by parents who exhibit acceptance, respect for the child's actions, and who clearly define and enforce age appropriate limits (Silvernail, 1985). On the other hand, Phillips (1983) reported that children with negative self-concepts tend to have parents who demonstrate continuous negative appraisals.

In extreme cases where children are continuously exposed to unhealthy relationships, characterized by unresponsive and unavailable caregiving, a psychologically damaged self image is likely to emerge (Silvernail, 1985). This phenomenon is heightened by the child's inability to think independently and abstractly. Consequently, children are unable to psychologically remove themselves and judge those who are judging them (Phillips, 1983). It is also assumed that a child who is exposed to an unhealthy environment will be negatively affected as an adult. In a study which involved a sample of juvenile delinquents, Meadow, Abramowitz, Cruz, and Bay (1981) found that negative self-concepts preceded delinquent behaviors.

Summerlin and Ward (1978) also investigated the relationship between parental style and children's self-concept. In their study, parents participated in group discussions with a goal of learning effective parenting techniques. It was indicated that as a result of participating in the training program, parents interacted more positively with their children. Consequently, gains in their children's self-concepts were noted.

Self-Concept in the Classroom

Researchers investigating the roots of self-concept development have attempted to attribute the quality of this development to the home environment (Phillips, 1983; Sears, 1970; Silvernail, 1985; Summerlin & Ward, 1979). It has been reported that the quality of interactions between children and their parents in the home settings transfers to other settings such as the school. Accordingly, children who experience positive constructive praise and positive interactions at home, will eventually transfer these learned skills to out-of-home settings and interact positively with others.

Survant (1972) reported that children with positive self-concepts tend to be more cooperative with adults and usually follow reasonable rules. On the other hand, she suggested that children with negative self-concepts may be withdrawn or may exhibit overly aggressive behaviors toward teachers and other children. Others have suggested that not only does the child's self-concept influence the quality of his or her interaction with others, but that the classroom environment may also impose influences on the developing self (Marshall & Weinstein, 1984).

Marshall and Weinstein (1989) reported that the nature of the classroom structure and the teacher's general control orientations may influence the child's developing self-concept. For example, they suggested that publicly assigning tasks of varying levels of difficulty to students may be potentially detrimental to the self-evaluation of

low achievers. Moreover, it has been reported that the teachers' perceptions of children's self-concepts are positively and significantly related to the children's expressed self-concepts (Perkins, 1958).

In 1989, Marshall suggested that if preschool children are exposed to school-like academic tasks, the pressure will more likely have detrimental effects on their self-concept and ability. In addition, the classroom environment and provided materials are further assumed to pose an effect on the developing child's abilities. Developmentally appropriate materials, for example, that challenge the child's abilities and encourage exploration, are believed to enhance the child's self-confidence and the manner in which new materials and other individuals are approached (Marshall, 1989).

Within the context of the classroom environment, teachers generally attempt to minimize antisocial aggressive behaviors such as fighting. At the same time, prosocial behaviors such as helping sharing, comforting, and cooperating are encouraged. As indicated earlier, research on the development of prosocial behavior has investigated the impact that parental styles, family composition, direct instruction, and empathic abilities have on enhancing positive behaviors. Other research , although very limited in number has examined prosocial behaviors in relation to self-concept. One of the most recent studies investigating this relationship was conducted by Cauley and Tyler (1989).

Self-Concept as it Relates to Prosocial Behavior

In their study, Cauley and Tyler (1989) predicted that preschool children with high scores on a self-concept measure would demonstrate higher frequencies of prosocial behaviors when compared to their peers with lower self-concept scores. Their sample consisted of 52 four and five year old children who were observed in their classrooms during free play activities. Each child's self and other initiated helping, sharing, and cooperating behaviors were coded using 15 second observation intervals for a total of 20 minutes per child. To assess children's self-concepts, the Purdue Self-Concept Scale for Preschool Children was individually administered. Supportive information about children's self-concepts and prosocial behaviors was obtained from teacher questionnaires.

The results of this study indicated a significant relationship between self-concept and prosocial behavior. The researchers concluded that children with positive self-concepts displayed more prosocial behaviors than children with negative self-concepts. When self-concept was examined for its possible relationship with the individual helping, sharing, and cooperating behaviors, a significant relationship was found between cooperation and self-concept. Also significant were the relationships between teacher ratings and children's prosocial behaviors and self-concepts. Tests of gender differences in prosocial behaviors were not significant.

From their study, Cauley and Tyler (1989) concluded that children's positive interactions are influenced by the quality of self-perceptions. Additionally, they reported that teachers are accurate observers of children's prosocial behaviors and are able to make appropriate assessments about their self-concepts. Given this information, the researchers perceived teachers as individuals who are able to reinforce children's prosocial behaviors and enhance their self-concepts.

In a similar study investigating the relationship between self-concept and prosocial behaviors, Larrieu and Mussen (1985) observed sharing, caring, and helping behaviors among fourth grade children. The children also responded to items drawn from the Piers-Harris Children's Self-Concept Scale which measures general and social self-concept as well as self-perceptions. The results of their data analysis moderately supported the assumption that children with positive self-concepts behaved more prosocially toward other individuals than children with lower self-concept scores.

There have been other studies on the relation between self-concept and positive behaviors in older children (Jarymowicz, 1977) and in adults (Trimkas & Nicolay, 1974). In 1977, Jarymowicz proposed that prosocial sensitivity in 16-18 year old boys can be increased through exposure to conditions that enhances their self-worth. The boys with self-worth problems were informed of their classmates' and adults' approval of their personal traits, and were

also exposed to conditions allowing them to experience satisfaction in test performance. As a result of this experimental condition, the self-worth of these boys was enhanced which in turn increased the prosocial actions. Jarymowicz concluded that the absence of problems with an individual's self-worth presented itself as a prerequisite for prosocial sensitivity.

Summary

The research on children's prosocial behavior has dramatically increased in the past twenty years. Researchers investigating prosocial acts such as helping, sharing, donating, and comforting have provided evidence that even very young children are able to exhibit such behaviors and that this ability increases with age. Further evidence suggests that a relation exists between children's increased perspective-taking abilities and their prosocial behaviors. A clear and consistent relation is far from established, however. Researchers have been encouraged to investigate for other personal variables that may contribute to the quality of prosocial behavior.

Among the personal variables that have received attention from researchers is the self-concept. Research in this area has progressed in spite of the conceptual and methodological difficulties in assessment. This research has contributed to the awareness that children as young as two years of age possess a unique sense of self that is different from that of others. The quality of the child's self-

concept has been assumed by researchers to be affected by the various experiences encountered through the course of interaction with significant others. Children who are continuously exposed to warm, consistent, and nurturing environments are likely to develop a positive sense of self. Conversely, children who are subjected to harsh experiences coupled with ridicule and inconsistencies are expected to feel more negatively about themselves and their personal abilities.

It has been repeatedly suggested that the social behavior of individuals is affected by the way they perceive their personal characteristics and abilities. Very few studies, however, have investigated this assumption, especially with young children. Some researchers have concluded that children with positive self-concepts engage more frequently in prosocial behaviors in comparison to their peers with negative self-concepts. However, this needs to be explored more systematically. The purpose of this study was to examine the relations between kindergarten children's self-concepts and their prosocial behaviors.

CHAPTER 3

METHODS

Overview

In this study, the relationship between kindergarten children's self-concepts as measured by the Purdue Self-Concept Scale For Preschool Children and teacher evaluations, and their prosocial behaviors, as measured by classroom observations, teacher evaluations and peer nominations, were explored.

Subjects

The sample of this study consisted of 58 children from four kindergarten classrooms. Thirty of the subjects were boys and 28 were girls. The children's ages ranged from four to six years with a mean age of 5.2 years. The mean age for boys was 5.1 years and 5.4 for girls. Of the 58 children, 66% were White, 19% Black, 12% Asians, and 3% were Hispanic.

One of the centers where this study was conducted was a university child care and research center. The parents of children at this center were associated with the university serving as faculty, staff, or students. The three other sites were also local child care centers serving clientele from the university community. The three off-campus centers were privately owned.

Measures and Procedures

In this study, children's self-concepts were assessed using the Purdue Self-Concept Scale For Preschool Children (Cicirelli, 1974), and naturalistic classroom observations were used to record the frequencies of each subject's helping, sharing, comforting, and cooperating behaviors. Classroom teachers were asked to evaluate children's self-concepts and prosocial behaviors and a peer nomination measure was used to evaluate children's perceptions of their friends' prosocial behaviors.

Measures

Purdue Self Concept Scale For Preschool Children

The Purdue Self-Concept Scale for Preschool Children (hereafter referred to as the Purdue) was developed by Cicirelli (1974) for individual administration with preschool and kindergarten children. As measured by this instrument, self-concept was defined as:

> an individual's awareness of his own characteristics and attributes (identity) and his evaluations of these characteristics in relation to others (self-esteem) (Cicirelli, 1974, p. 3).

The Purdue consists of 40 picture-pair items of children engaged in a variety of behaviors (refer to Appendix A). In each pair, one child is depicted as successfully accomplishing a task or completing a behavior, while the other is not. Children are asked to choose the picture within each pair that represents their own abilities and

skills. Presentation of the successful/unsuccessful items were alternated to avoid a response set.

The original measure depicted male children only. Permission was granted by the author to modify the measure by including pictures of girls as well as boys (refer to Appendix A). Accordingly, boys were administered the male version, while girls were administered the female version of the measure.

In addition, the original measure did not include a delineation of the 40 items into social, physical, and personal categories according to the type of self-concept assessed. Dividing the 40 items into the three subsets allowed the investigator, for example, to correlate not only the scores on the general self-concept with the total frequencies of prosocial behaviors, but also to correlate specific aspects such as the score on the personal self-concept category with cooperating behaviors (refer to Appendix A for the categories).

Reliability and Validity

Two types of reliability estimates were obtained in the original research (Cicirelli, 1974); internal consistency reliability and test-retest reliability. To establish internal consistency, the scale was administered to 412 children and reliability was reported at .85. Test-retest reliability was computed for a sample of 47 four year old children and reported at .70. The reliability of the Purdue Scale for the present sample was .86.

Construct validity for the instrument was established by comparing teacher ratings of children's competencies with children's scores on the Purdue (Cicirelli, 1974). Significant positive correlations between the two measures provided support for the validity of the instrument. Research by Carroll, Freidrich, and Hund (1984), Burge (1982), and Teplin, Howard, and O'Conner (1981) also supported the validity of the Purdue.

Scoring

Each child in the sample received a separate score for physical, social, and personal self-concept, as well as a total self-concept score. The measure was scored by coding one point for each positive response and a zero for each negative response. The total self-concept score for each child was obtained by summing individual item scores which ranged from 18 to 40. The physical, social, and personal self-concept scores were obtained by summing individual items corresponding to each of these categories. The range of scores for the physical, social, and personal self-concept categories were 5-12, 5-15, and 6-13 respectively. A high score on the Purdue reflected a more positive self-concept while a lower score reflected a less positive or negative self-concept.

Prosocial Behavior Observation Instrument

An observational instrument for recording children's prosocial behaviors as they occurred during free play and small group activities was developed by the investigator (refer to Appendix B). Four

categories of prosocial behavior were observed; helping, sharing, comforting, and cooperating. For the purposes of this study, these behaviors under spontaneous and requested conditions were coded as follows:

Helping: responding to the non-emotional needs of others. The child's helping behaviors were considered spontaneous when that child assisted another without the verbal or nonverbal direction of another. Helping was considered requested when the child helped another child in response to a verbal or non-verbal request of another.

Examples of operationally defined behaviors coded as helping included: the child helped another child with carrying an object, offered to clean up, sought an object that assisted another child with an ongoing activity, physically assisted another child who fell down, physically removed an obstacle from another child's path, physically or verbally offered help to another child or group of children, requested verbal help or assistance from another child or an adult to assist the child in need.

Sharing: The child's sharing behaviors were considered spontaneous when they occurred in the absence of a verbal or nonverbal request or direction of another. Sharing was considered requested when the child shared in response to the verbal or nonverbal direction of another.

Examples of operationally defined behaviors coded as sharing included: the child physically or verbally offered an object or part of an object that was in his/her possession to another child or group of children. The child invited another child or group of children to participate in an activity which required him/her to share the materials that were in his/her possession. The child shared a needed object that was in his/her possession with another child or group of children that assisted with their ongoing activity .

Comforting: responding to the emotional needs of another child in distress. Comforting behaviors were considered spontaneous when the child responded to the emotional needs of a distressed child without external verbal or nonverbal direction of another individual. Those behaviors were considered as requested when the child responded to the emotional needs of another in response to a verbal or nonverbal direction or request of another.

Examples of operationally defined comforting behaviors included: the child attended to the emotional needs of another child who was apparently distressed or crying, approached that child, maintained physical proximity, and offered verbal reassurance.

Cooperating: involved a child playing with at least one other child, engaged in mutual tasks while maintaining close physical proximity. Cooperating was considered spontaneous when the observed child engaged in an ongoing activity with other in the absence of a verbal or non verbal request of another. Cooperating behaviors were considered

requested when the child exhibited cooperative behaviors in response to a verbal or non verbal request of another.

Examples of operationally defined cooperating behaviors included: the child was involved in mutual activities with others such as a puzzle game, responded to the teacher's request of putting materials in their places, involved in sociodramatic play with other children, joined other children for large group activities in response to teacher's request, involved in a singing activity with at least one other child.

Children in the sample were randomly observed during free play activities using two-minute observation interval for a total of 40 per child. During the observations, children's spontaneous and requested prosocial behaviors were coded on the observation instrument.

Reliability and Validity

Reliability for the prosocial behavior observation instrument was established via interobserver agreement. Assisting in the observational procedures was one undergraduate student who underwent training before the data collection phase of this study to establish interobserver agreement. He was provided with the conceptual definitions of the prosocial behavior categories in addition to eighty examples of operational definitions for helping, sharing, comforting, and cooperating.

To establish interobserver agreement, the investigator and the assistant practiced coding videotaped segments of the helping,

sharing, comforting, and cooperating behaviors of ten kindergarten children . The practice observations consisted of recording each child's spontaneous and requested prosocial behaviors on the observational instrument during two minute periods for a total of ten minutes per child. Interobserver agreement was then determined by dividing the number of agreements by the number of agreements plus disagreements. The practice sessions continued until agreement among the observers reached the 80% level. The minimum acceptable level of interobserver reliability/agreement is 70% (Borg & Gall, 1989).

To establish content validity of the operational definitions of helping, sharing, comforting, and cooperating, twenty five doctoral students reviewed eighty examples developed to simulate events that would fall into the four prosocial behaviors categories. An example of each of the prosocial categories is provided here: Helping: Ben noticed that one of the game cards was missing and asked if anyone would look for it with him, Jennifer volunteered and began to look; Sharing: Bruce offered Betty some imaginary cookies from a plate he's carrying; Comforting: Tracy moved closer next to Allison who looked sad and put her arm around her; Cooperating: John was sitting next to Lisa playing with the same puzzle. The raters evaluated each of the scenarios by placing a check mark next to the choice they perceived best fit each example. Rater agreements for helping, sharing, comforting, and cooperating were 63%, 54%, 58%, and 60%

respectively with an average of 59% (refer to Appendix C for complete examples).

Scoring

Each child in the sample received a score for each of the types of spontaneous and requested prosocial behaviors, as well as overall totals. The score for each of these categories was obtained by summing the frequency of prosocial behaviors exhibited by each child in each category and across categories for total scores.

Peer Nomination

A peer nomination measure was included in this study as an exploratory procedure designed to assess children's perceptions of their peers' prosocial behaviors. Hymel and Rubin (1985) reported that the information obtained from peers concerning children's social behaviors are useful for several reasons. First, children spend a large amount of time interacting with each other over an extended period of time and in a variety of experiences. Information gathered from the children are based on such social experiences. Second, peer nominations of a target child provides a variety of perspectives on that child's behaviors. Finally, peers function as 'inside' sources for information providing investigators with insight concerning the target child's behavioral characteristics.

This measure was a variation of those previously used by Eisenberg et al. (1988) and Wentzel (1991). After completing the Purdue, children were administered the peer nomination measure.

They were shown a class picture of all the children, and were asked to nominate those peers who they perceived as exhibiting helping, sharing, comforting, and cooperating prosocial behaviors. The examiner proceeded by explaining to each child that he/she can nominate one, two, or as many peers or none at all. Each prosocial behavior was referred to in turn by the examiner and children's responses were recorded on the peer nomination scoring sheet. This scoring sheet had all the children's names on it with four spaces under each child's name corresponding to the four prosocial categories. Children's nominations were tallied under their peers' names (refer to Appendix D for a sample scoring sheet).

Scoring

Each child in the sample received five scores as a result of the peer nomination measure. Four of the scores corresponded to the four prosocial categories i.e., helping, sharing, comforting, and cooperating. The fifth score consisted of an aggregate sum across the four categories. Scores for all the categories were obtained from summing the frequencies of nominations by the peers.

Teacher Questionnaire

Teachers in the four classrooms from which children were drawn were asked to complete a two part questionnaire (refer to Appendix E). The first part included items that required the respondents to evaluate each child's competencies and skills. The Teacher Rating

Scale of Child's Actual Competence and Social Acceptance developed by Harter and Pike (1983) was used for this purpose.

A verbal description of each item was provided in the questionnaire and the teacher rated the child's cognitive and physical competencies in addition to peer acceptance. This particular scale was chosen due to the similarities of its items to those on the Purdue. For example, one of the questions asked if the child was "good at climbing". The Purdue also included an item asking children to evaluate their climbing abilities. The teacher rating scale used in this study was developed by Harter and Pike (1984) as part of the Pictorial Scale of Perceived Competence and Social Acceptance of Young Children with a reported reliability of .89. The reliability of this scale for the present sample was .67.

The second part of the teacher questionnaire consisted of eight questions evaluating the prosocial behaviors of the 58 children involved in this study. These questions were developed by the investigator and required responses to questions on the spontaneous and requested helping, sharing, comforting, and cooperating behaviors of the children. The teachers were asked to evaluate each child's prosocial behaviors according to a four level scale which ranged from 'not very true' to 'really true'. The reliability of the spontaneous scale was .88 and for the requested scale .85.

The validity of the teacher prosocial behavior questionnaire was established in the same way that the validity of the prosocial

operational definitions were established. Nineteen doctoral students evaluated the contents of the questionnaire. The average rater agreement was 89%.

Scoring

Each child's self-concept in addition to spontaneous and requested prosocial behavior were evaluated using the four level teacher rating scales. A score of 1, for example, was given to a child who rarely engaged in spontaneous helping behaviors while a score of 4 was given by the teacher if that child very often engaged in such a behavior. From teacher ratings of prosocial actions, each child received three separate scores; spontaneous, requested, and total. For the self-concept rating scale, teachers evaluated each child's physical, cognitive, and social competencies also on a four level scale with a score of 1 being the lowest. From this questionnaire, each child received four separate self-concept scores; physical, cognitive, social, and a total score.

Procedures

The prosocial behavior observations were conducted prior to the administration of the Purdue. The Purdue and peer nomination measures were then administered to individual children during the same individual interview sessions. Teachers questionnaires were distributed to the four head teachers.

Parent Information and Permission Form

Before the onset of the study, the children's parents were provided with an information and permission form (Appendix F). This form included general information about the nature and length of the self-concept measure. Parents were also informed that their child would be observed by two observers during the regular classroom activities.

Prosocial Behavior Observations

Classroom Observations

The complete observational and testing procedures were completed consecutively at each center, over a seven week period. At the onset of the observations at each of the centers, children were assigned numbers for identification and were observed randomly according to a predetermined schedule of observation. After interobserver agreement was established, children in the study were randomly observed for two-minute intervals for a total of 40 minutes per child. The children's social interactions were observed during free play and small group activities. These activities were chosen because they usually involved minimal teacher intervention allowing for maximum social interaction among the children.

During the classroom observations, the observers tallied these and similar behaviors on the observation instrument under each of the categories in the space provided specifically for coding either spontaneous (S) or requested (R) prosocial behaviors. When the observed child did not exhibit any prosocial behaviors during a two

minute period of observation, an '–' was placed in the provided spaces. During these observations the identity of the recipients of prosocial acts were also coded on the instrument as either a child or the teacher.

Each child was observed regardless of whether he/she was interacting with other children and the observation period was terminated only when the two minutes were over. However, a prosocial episode was identified when the observed child initiated a prosocial interaction or responded to the request by the teacher, another child or group of children by exhibiting prosocial acts. Within the two-minute observation intervals, children's prosocial behaviors, in specific, frequencies of helping, sharing, comforting, and cooperating as well as the antecedents of these behaviors (i.e. spontaneous or requested) were coded by the observers on the prosocial behavior observation instrument. When the observed child exhibited an act of helping, sharing, comforting, and/or cooperating without a request from the teacher or another child, these behaviors were coded by the observers as <u>spontaneous</u> 'S'. However, if the child exhibited any of the prosocial behaviors within the two minute observation interval in response to a teachers request or that of another child, the behaviors were then coded as responses to <u>requests</u> 'R'. When the observed child exhibited a prosocial behavior but this behavior was not observed by the raters as either spontaneous or

requested, it was then coded as not observed indicated by the letter "N' on the observational instrument.

If within any given two minute observational interval the child displayed separately identifiable helping, sharing, comforting, and cooperating behaviors the raters coded these as four separate behaviors even when the target child was still interacting with the same individual. For example, when Ann helped Mike off the floor, and offered him the cookie that was in her hand, those were coded as two separate prosocial behaviors. When, on the other hand, John sat next to Sally for two minutes working on the same puzzle, this was coded as one cooperating behavior. During these classroom observations, the recipients of prosocial behaviors were identified as either another child or the teacher with this information coded under the letter 'C' on the observation instrument. If the recipient of a positive act was the teacher, for example, this information was coded as "T". If another child was the recipient, however, the number of that child was coded on the instrument.

Following the two minute observation interval, the two observers abstained from formal observation for 30 seconds and then resumed with observing the next child. The investigator had a stop watch and determined the onset and termination of the two-minute observational intervals. After the completion of the observations, teachers were asked to complete the two part questionnaire evaluating each child's self-concept and prosocial behaviors.

Purdue Self Concept Scale For Preschool Children

Administration

All of the children in the sample were individually tested using the Purdue Self-Concept Scale. There was no time limit for the administration of the instrument, however, it took approximately 15 minutes for each administration. The Purdue was administered to each child in a quiet area of the classroom or the center. The materials used during the testing were the Purdue instrument and the scoring sheet for recording each child's responses. Before administering the test, the examiner presented each child with three practice items similar to the ones on the Purdue, using the following protocol:

> "This is a game about two children. Listen carefully while I tell you a story about them. Then tell me which child is most like you."

After the practice items were presented and children demonstrated their understanding of these items, the Purdue was then administered. The descriptions of the items were read to the child while pointing to the item being described. The child was then asked "which child is most like you", and he/she either respond by verbally referring to the chosen description or pointing to it, or both. The child's response was then recorded on the response sheet. The same procedure was followed for each of the picture pair-items proceeded by "here's another story". The rest of the children were also

administered the instrument following these same procedures. All of the 58 children in the study successfully completed the test in separate individual sessions.

Peer Nomination

The peer nomination task was individually administered to children in a quiet area of the classroom or center. Each child was shown a class picture of his/her peers and was asked to nominate the children who help, share, comfort, and cooperate. The procedure for administering the task began with the examiner asking the child to "point to the children who help others". The examiner added, "you can point to one child, two children, or as many as you want, or none at all". The child's responses were coded on the scoring sheet as he/she nominated each peer. The same procedure was followed for the rest of the prosocial behavior categories. None of the children had difficulty completing the task, but some needed clarification as to the meaning of comforting and were given examples of the behavior by the examiner.

Teacher Questionnaire

Each of the classroom teachers was provided with the two part questionnaire to evaluate each child's prosocial behavior and self-concept. Teachers responded to all of the questions pertaining to children's spontaneous and requested helping, sharing, comforting, and cooperating prosocial behaviors. On the self-concept rating form, teachers responded to most of the items but omitted the ones that did

not apply to the children in their classroom. For example, the item asking teachers to evaluate if a child "gets stars on papers" was not responded to by two of the four teachers.

Statistical Analysis

Data analysis was completed using three types of statistical procedures: Pearson product moment correlations, multiple regression, and multivariate analysis of variance.

The first question was analyzed using Pearson product moment correlations (one independent and one dependent variable) to assess how and to what extent the variability in the dependent variable (prosocial behavior) depended upon the variation in the independent variable (as measured by the Purdue Self-Concept Scale). The dependent variable measure was the total number of prosocial behaviors exhibited by each child across each of the helping, sharing, comforting, and cooperating categories. The independent variable measure was the total score obtained by each child on the self-concept scale.

The second question was also analyzed using Pearson product moment correlations to assess the relations between the single independent variable (self-concept) and the sum of spontaneous and sum of requested prosocial behaviors and self-concept.

The third question was analyzed using the multiple regression procedure to test relations between multiple independent variables

(physical, social, and personal self-concepts) and each of the dependent prosocial behavior variables (spontaneous and requested helping, sharing, comforting , and cooperating).

The fourth question was analyzed using a multivariate analysis of variance to compare the two groups, boys and girls, in terms of the total frequency scores on helping, sharing, comforting, and cooperating. This analysis was used because the analysis involved multiple continuous variables (helping, sharing, comforting, cooperating) and a categorical variable (gender).

Pearson product moment correlations were used to assess the relations between teacher ratings of prosocial behaviors and observed prosocial behaviors, and also between teacher ratings of self-concept with children's scores on the Purdue scale. Correlations were also used to test the relation between the observed prosocial behaviors and responses on the peer nomination measure.

CHAPTER 4

Results

Overview

The purpose of the present study was to explore the relations between the prosocial behaviors of kindergarten children and their self-concepts. To investigate this relation, 58 children were observed in their classroom settings during free choice activities. Four types of prosocial behaviors (helping, sharing, comforting, and cooperating) were observed, and further identified as occurring spontaneously or in response to a request. Each child was observed for a total of 40 minutes over a seven week period.

Each child in the sample also responded to the 40-item Purdue Self-Concept Scale for Preschool Children. As an exploratory measure, these items were divided into three major categories representing physical, social, and personal self-concepts. Two additional measures were included for the purpose of measuring children's prosocial behaviors and their self-concepts from the perspectives of others. In a questionnaire, teachers were asked to evaluate each child's spontaneous and requested prosocial behaviors in addition to their self-concepts. The second measure included a peer nomination scale of prosocial behaviors.

Data analysis was completed using three types of statistical procedures. Pearson product moment correlations were used to determine how and to what extent the variability in the dependent

variable(s) (prosocial behavior as measured by classroom observations) depended upon the variation in the independent variable (as measured by the Purdue Self-Concept Scale for Preschool Children). Multiple regression was used to test the relation between the multiple independent variables (physical, personal, and social self-concept) and the total combined spontaneous and requested prosocial behaviors. A multivariate analysis of variance was used to compare boys and girls in terms of the total frequency scores on helping, sharing, comforting, and cooperating behaviors. Pearson product moment correlations were also used to examine the relations among teacher ratings and peer nominations with children's self-concept and prosocial behavior. The results of these analyses are reported in four major sections corresponding to the four research questions of this study.

Descriptive Statistics: Prosocial Behavior and Self-Concept

Means, standard deviations, and ranges for the 15 prosocial behavior categories are presented in Table 1, and for the four self-concept categories in Table 2 (Table of Correlations and Intercorrelations is found in Appendix G). The total prosocial behavior score for each child was obtained by summing the frequencies of spontaneous and requested helping, sharing, comforting, and cooperating behaviors. The self-concept score was derived from the total score obtained by each child on the individually

administered Purdue Self-Concept Scale For Preschool Children. Scores for the physical, social, and personal self-concepts were obtained by summing the positive responses for each child within each of the categories.

Table 1

Means, Standard Deviation, and Range of Frequencies of Children's Prosocial Behaviors

Variables	Mean	SD	Range
Spontaneous			
Helping	1.91	1.55	0-7
Sharing	.64	.91	0-4
Comforting	.02	.13	0-1
Cooperating	8.16	3.50	0-22
Requested			
Helping	.81	.95	0-3
Sharing	.34	.69	0-3
Comforting	.00	.00	0-0
Cooperating	7.02	3.03	1-17
Total (S & R)			
Helping	2.71	1.97	0-10
Sharing	.98	1.92	0-6
Comforting	.05	.39	0-1
Cooperating	15.17	4.57	6-29
Spontaneous	10.72	3.98	5-2
Requested	8.17	3.43	1-22
Prosocial Behavior	18.88	5.76	9-42

Note. N = 58.

Note. S = Spontaneous; R = Requested.

As can be seen from Table 1, spontaneous prosocial behaviors for all the categories have the highest means compared to requested behaviors. Also, cooperating behaviors have the highest means in comparison to helping, sharing, and comforting acts.

Table 2
Means, Standard Deviations, and Ranges of Self-Concept Scores

Variables	Mean	SD	Range
Self-Concept			
Physical	10.07	1.71	5-12
Personal	11.22	1.96	6-13
Social	13.09	2.44	5-15
Total	34.33	5.42	18-40

Note. N = 58.

An examination of the self-concept means shown in Table 2 indicates that children scored higher on the social self-concept scale, followed by the personal, and then the physical category.

Relations Between Prosocial Behavior and Self-Concept

To test the relations between the total frequencies of prosocial behaviors and total self-concept scores, a Pearson product moment correlation was used. The results of this analysis indicated a non significant correlation of .21 between prosocial behavior and self-concept. Performance on the self-concept measure did not predict the frequencies of the observed prosocial behaviors. The variability in

prosocial behavior due to self-concept accounted for only 4% of the variance.

Relations Between Spontaneous and Requested Prosocial Behaviors and Self-Concept

During the classroom observations, prosocial behaviors were identified as being either spontaneous or requested. The correlation between these behaviors and the total self-concept scores were examined. A significant correlations was found between total spontaneous prosocial behaviors and total self-concept ($r = .27$, $p = .02$). This significant correlation accounted for 7% of the variance shared between the two variables. Correlations between the individual prosocial behaviors with self-concept revealed that total cooperating was significant ($r = .25$, $p = .05$). An examination of the two cooperating categories (spontaneous and requested) indicated significant correlations between total self-concept and spontaneous cooperating ($r = .25$, $p = .03$).

The correlations between total requested prosocial behaviors as well as the individual requested behaviors with total self-concept were all non significant. Tables 3 and 4 show all the correlations between the individual and total prosocial behavior categories as they related to total self-concept.

Table 3

Correlations Between Total Prosocial Categories with Self-Concept

Variables/ Self-Concept	r	p
Total		
Helping	.01	.47
Sharing	.11	.20
Comforting	.02	.45
Cooperating	.22	.05*
Total		
Spontaneous	.27	.02*
Requested	.04	.37

Note. N = 58.
* $p < .05$.

Table 4

Correlations Between Individual Prosocial Behaviors and Self-Concept

Variables/ Self-Concept	r	p
Spontaneous		
Helping	.02	.45
Sharing	.16	.12
Comforting	.02	.45
Cooperating	.25	.03*
Requested		
Helping	.00	.49
Sharing	.01	.48
Comforting	.00	.00
Cooperating	.05	.36

Note. N = 58.
* $p < .05$.

Relations Between Spontaneous and Requested Prosocial Behaviors and Physical, Social, and Personal Self-Concepts

Scores for the physical, social, and personal self-concepts were obtained by summing the positive responses within each category. The scores representing the spontaneous and requested prosocial behavior categories were obtained by summing the frequencies of these behaviors as they occurred during classroom free play activities. The data for this question were analyzed using multiple regression. Due to the lack of variance in the comforting prosocial variable, it was excluded from this analysis.

A significant relation was found between the set of physical, personal, and social predictors and spontaneous cooperating which explained 14% of the variance ($R = .37$, $F = 2.84$). This indicates that the variance in spontaneous cooperating can be predicted from the linear composite of the three self-concept predictors. However, no single predictor variable contributed a significant amount of variance after controlling for the other two. The correlations between physical, personal, and social self-concept with requested helping, sharing, and cooperating were all non significant. Table 5 shows the multiple correlations among these variables.

Table 5

Multiple Correlations Between Prosocial Behavior Categories and Self-Concept Categories

Variables	R	R^2	F (3,54)
Physical, Social, Personal Self-Concept with Spontaneous			
Helping	.09	.01	.16
Sharing	.17	.03	.55
Cooperating	.37	.14	2.84*
Physical, Social, Personal Self-Concept with Requested			
Helping	.16	.02	.45
Sharing	.15	.02	.39
Cooperating	.16	.03	.49

Note. N = 58.

* $p < .05$.

Gender Differences in Children's Prosocial Behaviors

Data relating to this question were analyzed using a multivariate analysis of variance to compare the two groups, boys and girls, and determine if there were significant differences between them on the four prosocial behavior categories; helping, sharing, comforting, and cooperating. Results indicated that there were no significant differences among boys and girls with regard to the frequencies of the four prosocial behavior categories. There were also no

significant differences between the two groups on the total prosocial behavior category. Table 6 shows the analysis of differences.

Table 6
Analysis of Differences in Means Between the Two Groups

Variables	Boys		Girls			
	Mean	SD	Mean	SD	F	p
Helping	2.47	1.76	2.96	2.19	.92	.34
Sharing	.97	1.40	1.00	1.19	.01	.92
Comforting	.00	.00	.11	.57	1.07	.30
Cooperating	5.10	3.80	15.25	5.34	.02	.90
Total P. B.	18.53	4.99	19.25	6.56	.22	.64

Note. P. B. = Prosocial Behavior.
Note. Boys N = 30, Girls N = 28.
* $p < .05$.

Teacher Ratings of Children's Prosocial Behaviors and Self-Concepts

Additional information concerning children's prosocial behaviors and their self-concept was gathered from teacher rating scales. The means, standard deviations, and ranges of teacher ratings of prosocial behavior categories and self-concept categories are reported in Tables 7 and 8. The four classroom teachers evaluated each child's spontaneous and requested helping, sharing, comforting, and cooperating prosocial behaviors. From this rating, each child received three scores. The possible ranges for each the spontaneous and requested scores were 4-16 and the possible range for the total scale

was 8-32. As reported in Table 7, the actual range for the spontaneous ratings was 5-16, requested 4-15, and for total 14-20. The information obtained from teacher ratings was correlated with each child's observed prosocial behavior frequencies and self-concept scores.

Table 7

Means, Standard Deviations, and Range of Teacher Ratings of Prosocial Behaviors

Variables	Mean	S. D	Range
Teacher Ratings			
Spontaneous	12.17	3.30	5-16
Requested	6.33	3.04	4-15
Total Prosocial	18.50	1.45	14-20

Note. N = 58.

Table 8

Means, Standard Deviations, and Range of Teacher Ratings of Children's Physical, Social/Peer, and Cognitive/Personal Self-Concept

Variables	Cases	Mean	S. D	Range
T. R. Physical Self-Concept	57[a]	17.11	2.97	9-22
T. R. Peer/Social Self-Concept	45	14.84	3.51	6-20
T. R. Cognitive/Personal Self-Concept	52	16.67	2.10	10-20
T. R. Total Self-Concept	38	50.74	5.55	39-59

Note. T. R. = Teacher Ratings.

[a]Items on teacher questionnaires that were not responded to for a particular group were eliminated for the entire sample.

Table 9 presents the correlations between the teacher ratings of spontaneous and requested prosocial behaviors with subjects' total spontaneous prosocial behaviors and subjects' total requested prosocial behaviors derived from the four prosocial categories.

Table 9

Correlations Between Teacher Ratings of Spontaneous and Requested Prosocial Behaviors with Subject's Spontaneous and Requested Prosocial behaviors

Variables	r	p
T. R. Spontaneous with Subjects' Spontaneous	.18	.09
T. R. Requested with Subjects' Requested	.25	.03*
T. R. Total with Subjects' Total Prosocial	.16	.12

Note. T. R. = Teacher Ratings.

Note. N = 58.

* $p < .05$

Table 9 shows the relation between subjects' requested prosocial behaviors and teacher ratings of requested prosocial behaviors was significant (r= .25, p= .03). This indicated that teachers' perceptions and evaluations of requested prosocial behaviors are similar to the observed prosocial behaviors. The relationship between subjects' spontaneous prosocial behaviors and teacher ratings of spontaneous prosocial behaviors was not significant. This indicated that teachers perceptions and evaluations of children's spontaneous prosocial behaviors were not similar to the frequencies of observed prosocial behaviors. The correlation between the total prosocial behaviors of

subjects and the total score on the teacher rating scale was non significant. This indicated that teacher's perceptions of children's prosocial behaviors and the children's observed prosocial behaviors were not similar.

Teachers also responded to a rating scale evaluating each child's self-concept on three levels; cognitive/personal, peer acceptance/social, and physical competence. These scores were correlated with subjects' scores on the three self-concept categories; personal, social, and physical self-concept. The total scores on the teacher rating scale were also correlated with subjects total self-concept scores. Correlations are presented in Table 10.

Table 10

Correlations Between Teacher Ratings of Personal, Social, and Physical Self-Concept with Subject's Personal, Social, and Physical Self-Concepts

Variables	[a]Cases	r	p
T.R. Cog/Personal with Subjects Personal S.C.	52	-.09	.26
T.R. Peer/Social with Subjects Social S. C.	45	.03	.42
T.R. Physical with Subjects Physical S. C.	41	-.07	.34
T.R. Total with Subjects Total Self-Concept	26	-.14	.25

Note. T. R. = Teacher Ratings.

Note. S. C. = Self Concept.

[a]The uneven number of cases is due to the inapplicability of some questionnaire items to the children.

* $p < .05$.

The relations between teacher ratings of cognitive/personal, peer/social, and physical competencies with children's self-concepts were non significant. This indicates that the teacher's perceptions of

children's self-concepts and competences were not similar to the children's performance on the self-concept measure.

Pearson product moment correlations were also used to examine the relations between teacher ratings of spontaneous, requested, and total prosocial behaviors with the children's total scores on the Purdue self-concept measure. The results of this analysis are reported in Table 11.

Table 11
Relationships Between Spontaneous, Requested, and Total Prosocial Behavior Teacher Ratings with Total Self-Concept

Variables/ Self-Concept	r	p
Spontaneous T. R.	.14	.14
Requested T. R.	-.12	.18
Total T. R.	.06	.32

Note. T. R. = Teacher Ratings.
Note. N = 58
* $p < .05$.

As can be seen from Table 11, the correlations between teacher ratings of spontaneous prosocial behaviors and self-concept were non significant. The relationship between teacher ratings of requested prosocial behaviors and self-concept were also non significant. Also indicating a non significant correlation was the relationship between total teacher ratings and self-concept. These non significant

relations indicate the lack of similarities between teacher ratings of prosocial behaviors and children's self-concepts.

As indicated previously, a peer nomination measure was used for the purpose of exploring similarities between peer evaluations of prosocial behavior and observed frequencies of these behaviors. Children were asked to nominate their peers who they perceived as displaying any, some, or all of the prosocial behaviors. Each child's score on this measure was obtained by summing the frequencies of nominations within each prosocial behavior category. Means and standard deviations for the variables are presented in Table 12 and information concerning the correlations among the variables is presented in Table 13. As is shown in Table 12, the prosocial behavior category most often referred to by peers was cooperating, followed by helping, sharing, and then comforting.

The results of the correlation analysis indicated that there were no significant relations between peer nominations and observed frequencies of prosocial behaviors. There appears to be little similarity between children's recollections of peer prosocial behaviors and observations in the classrooms.

Table 12

Means, Standard Deviations, and Range of Frequencies for Peer Nominations of Helping, Sharing, Comforting, and Cooperating

Variables	Mean	SD	Range
Peer Nominations			
Helping	3.10	1.65	0-8
Sharing	2.84	1.47	0-6
Comforting	2.45	1.49	0-7
Cooperate	4.09	2.06	0-10
Total	12.48	4.69	3-26

Note. N = 58.

Table 13

Correlations Between Peer Nominations of Prosocial Behaviors with Observed Prosocial Behaviors

Variables	r	p
P. N. Helping with Observed Helping	-.07	.31
P. N. Share with Observed Sharing	-.05	.36
P. N. Comforting with Observed Comforting	-.04	.38
P. N. Cooperating with Observed Cooperating	-.08	.27
P. N. Total with Total Observed Prosocial Behavior	-.13	.16

Note. P. N. = Peer Nominations.

Note. N = 58.

* $p < .05$

The relations between teacher ratings of prosocial behaviors and peer nominations of prosocial behaviors were also explored. The correlations between peer nominations of helping with teacher ratings of prosocial behavior (r=.25, p= .03), peer nominations of cooperating with teacher ratings of prosocial behavior (r= .34, p= .01), total peer nomination with teacher ratings of spontaneous prosocial behaviors (r= .30, p= .01) were all significant. Also significant were the relations between teacher ratings of spontaneous prosocial behaviors with peer nominations of sharing (r= .28, p= .02), comforting (r= .27, p= .02), cooperating (r= .62, p= .01), and total peer nomination (r=.55, p= .01). These significant correlations between teacher ratings and peer ratings of prosocial behaviors indicate that similarities in the perceptions of the two groups exist concerning the prosocial behaviors exhibited by the children within the classroom setting.

Summary

The expectation that children with higher scores on the Purdue Self-Concept Scale would display higher frequencies of prosocial behaviors when compared to their peers with lower scores was partially supported by the data of this study. Significant relations were found between the total spontaneous category, total cooperating, and also spontaneous cooperating when correlated individually with self-concept. Non significant relations were found

between the total prosocial behavior category with self-concept and between the individual spontaneous and requested behaviors with the exception of spontaneous cooperating. Also indicating non significant relationships were the correlations between the totals of the four prosocial categories and self-concept. Non significant was the correlation between the total requested prosocial behavior category and self-concept.

The multiple correlation between the prosocial behavior category and the set of predictor variables (physical, social, personal self-concept) also indicated non significant relationships. The multiple correlations between those predictor variables with spontaneous helping and sharing, and requested helping, sharing, and cooperating were also not supported not supported by the data. Support was found, however, for the relationship between physical, social, and personal self-concepts and spontaneous cooperating. The multivariate analysis examining gender differences between the means of the two groups on the four prosocial behavior categories was non significant.

A significant correlation was found between teacher ratings of requested prosocial behaviors and children's observed requested behaviors. No relationships were found between teacher ratings of prosocial behaviors and self-concept and children's observed behaviors and their self-concepts. Peer nominations of prosocial

behaviors were not found to be a reliable indicator of observed prosocial behaviors.

An examination of the means of the prosocial behavior categories indicated that children exhibited more cooperating behaviors followed by helping, sharing, and comforting. The means also indicated that children displayed higher frequencies of spontaneous behaviors within each of the prosocial categories as opposed to requested behaviors. With regard to self-concept, children on average scored higher on the social self-concept category, followed by personal and finally physical self-concept.

CHAPTER 5

Discussion

Overview

The purpose of this study was to explore the relationship between kindergarten children's prosocial behaviors and their self-concepts. Spontaneous and requested instances of helping, sharing, comforting, and cooperating were observed during preschool play, and the Purdue Self-Concept Scale was administered. Teacher questionnaires and peer nomination tasks provided additional supportive data.

In this study, it was expected that children with higher self-concept scores would exhibit more prosocial behaviors than children with lower self-concept scores. A significant relation was found between the total spontaneous scores and self-concept. Also significant were the relations between total cooperating with self-concept and also between spontaneous cooperating and self-concept. The relation between total prosocial behavior and self-concept was non significant. There were also no significant relations between the individual spontaneous and requested behaviors and self-concept, with the exception of spontaneous cooperating.

A significant relation was found between the set of physical, social, and personal self-concept predictors and spontaneous cooperating. The correlation between those predictors and total prosocial behavior was non significant. There was also no significant relation between those predictors and spontaneous helping and

sharing and requested helping, sharing, and cooperating. No gender differences were found between boys and girls with regard to helping, sharing, comforting, and cooperating prosocial behaviors.

Teacher ratings of children's spontaneous prosocial behaviors were not related to children's observed spontaneous behaviors. A significant relationship was found between teacher ratings of requested prosocial behaviors and children's observed requested behaviors. An examination of the similarities between peer nominations of helping, sharing, comforting, and cooperating prosocial behaviors and children's observed prosocial acts indicated non significant relations.

Prosocial Behavior and Self-Concept

The underlying assumption guiding this study was that kindergarten children were capable of exhibiting various types of prosocial behaviors and that the frequencies of these behaviors would reflect the quality of their performance on the self-concept scale. The assumption that young children were capable of exhibiting various types of prosocial behaviors within the school setting was certainly supported by the observational data. The relation between these positive behaviors as total scores and self-concept, however, was not significant. This finding is neither consistent with, nor supportive of the results of other research studies that investigated similar relationships (Cauley & Tyler, 1989; Larrieu & Mussen, 1985).

Since the same objective self-concept task was used in both, the present study and Cauley and Tylers', it is unlikely that inconsistencies in the results were a function of this measure. However, variations of the prosocial behavior operational definitions and observational measures may have contributed to the discrepancies between the results of the two studies.

An examination of the operational definition that guided the prosocial behavior observations of this study and the ones used by Cauley (1985) provided a pattern of similarities but also revealed differences. In both studies, for example, sharing was similarly defined as the offering of an object such as clay, or a part of an object in the child's possession to another child or group of children. Dissimilarities existed, however, with regard to the categories in which behaviors were placed. In this study, for example, a distinction was made between helping and comforting behaviors. When one child approached another crying child to comfort him, this behavior was coded as comforting in this study while Cauley predefined and coded such a behavior as helping. The inclusion of helping and comforting behaviors in one category, as was the case in Cauley's study, may have contributed to increasing the frequencies of behaviors within the helping category.

Another factor which may have contributed to the discrepancies between Cauley and Tyler's study and the present one was the length of the prosocial behavior observational interval. Each child in this

study was observed individually and randomly using two minute intervals for a total of 40 minutes per child. Cauley and Tyler, on the other hand, observed children in randomized groups of 10 over a seven minute period using 15 second observation intervals for a total of 20 minuted per child. In the present study, for example, if a child was engaged in the same cooperative act for the entire two minute period of observation, that behavior was coded as one cooperative prosocial act. However, in Cauley and Tyler's study it was possible that within the seven minute period of observation, each of the ten children may have been observed at least on two separate occasions, especially considering the length of the observation interval. It is then possible that if a child was engaged in the same cooperative act during the second round of observations, he/she would have received an additional score for cooperating. Thus, it is possible that the differences in the length of the two observational intervals may have in effect limited the opportunity for coding prosocial behaviors in this study while maximizing these opportunities in Cauley and Tyler.

Spontaneous and Requested Prosocial Behaviors and Self-Concept

Significant relations were found between the total spontaneous behaviors and self-concept, total cooperating with self-concept, and also spontaneous cooperating with self-concept. The significant finding between total cooperating and self-concept supports the results of Cauley and Tyler who also reported on the significance

between the two variables. Also significant was the correlation between spontaneous cooperating and physical, social, and personal self-concepts. Non significant relations were found between the requested individual and total prosocial behaviors with the total self-concept score. Also non significant were the relationships between spontaneous and requested helping and sharing, and also requested cooperating with the three self-concept predictors.

A pattern emerged in the data indicating that within each category, children exhibited more spontaneous than requested prosocial behaviors. This finding was consistent with the findings of several other studies which reported higher frequencies of spontaneous prosocial behaviors than requested ones (Bar-Tal, Raviv, & Goldberg, 1982; Cauley, 1985; & Eisenberg-Berg & Hand, 1979). Thus, it is possible to conclude that children display more spontaneous than requested prosocial behaviors.

These significant results provide further support for the view that social behaviors are influenced by the quality of self-perceptions (Epstein, 1973; Marcus & Wurf, 1987; Marshall, 1989; & Pervin, 1984). One possible explanation for these positive relations may be that children with higher self-concepts are less focused on the self and are more aware of others' needs, thus increasing the likelihood for spontaneous cooperative behaviors to occur.

In other research, children who exhibited high frequencies of spontaneous prosocial acts were reported to be more sensitive to the

needs of others (Iannotti, 1985), and displayed high levels of positive affect (Lennon & Eisenberg, 1987). In addition, Eisenberg, Cameron, Tryon, and Dodez (1981) reported that children who frequently engaged in spontaneous actions were more independent in comparison to their peers who displayed more requested prosocial behaviors. Considering the independent nature of children who display high frequencies of spontaneous prosocial behaviors (Eisenberg et al., 1981), perhaps it may be argued that these children perceive themselves as competent individuals who are able to interact effectively with others. If this is the case, then it may be that these children are more self-confident about their abilities in meeting the needs of others and therefore approach situations both confidently and without the verbal or nonverbal direction of others. This constellation of positive and confident prosocial behaviors may form the underpinnings of social competence. Further research may examine this relationship.

Gender Differences in Prosocial Behaviors

There were no significant differences between boys and girls with regard to helping, sharing, comforting, and cooperating prosocial behaviors. These results were expected because studies of prosocial behavior and gender differences have generally reported non significant differences among the two groups (e.g. Dunn & Munn, 1986;

Cauley & Tyler, 1989; Eisenberg-Berg & Hand, 1979; Eisenberg-Berg & lennon, 1980; lannotti, 1985; Stanhope, Bell, & Parker-Cohen, 1987).

Traditional cultural stereotypes motivated researchers to examine gender differences in prosocial behavior. While boys, for example, are expected to be more competitive and display nonemotional behaviors, girls are encouraged to be more empathic, sensitive, and to respond to others' needs (Radke-Yarrow, Zahn-Waxler, & Chapman, 1983). With these predominant stereotypes, one would expect apparent gender differences. However, given the consistency in non significant gender differences in the recent studies, future researchers need to look beyond gender differences.

Teacher Ratings and Observed Prosocial Behaviors and Self-Concept

A significant relation was found between teacher ratings of requested prosocial behaviors and children's requested behaviors. One possible explanation for this significant finding may be that teachers in this study were directly involved with requesting and receiving prosocial acts, but were not directly involved in spontaneous ones. An examination of the observational data indicated that the majority of requests for prosocial behavior were made by teachers. More specifically, 83% of the requested cooperating acts displayed by children were in response to a teachers request, while teachers were the recipients of only 21% of the spontaneous cooperating behaviors. Given that teachers were more often the recipients of requested than

spontaneous behaviors, it is not surprising that there was a relationship between their evaluations and the children's observed requested behaviors.

Similar studies have also used teacher ratings but results have been conflicting. While Cauley and Tyler (1989), for example, reported significant relations between teacher ratings and children's behaviors, Iannotti (1985) indicated non significant correlations among the two measures.

In this study, the relationship between children's spontaneous prosocial behaviors and teacher ratings of those behaviors was non significant. It may be possible that children were engaged in spontaneous prosocial behaviors more often than the teachers realized. It may also be possible that teachers were more focused on disruptive behaviors and involved in problem solving tasks, thus minimizing the opportunities for them to notice spontaneous prosocial interactions among the children. Given these possible situations, it is not be surprising that dissimilarities existed between teacher ratings of spontaneous behaviors and children's spontaneous behaviors.

Peer Nominations and Observed Prosocial Behaviors

The relationships between peer nominations of prosocial behaviors and observed prosocial actions were non significant. This finding was partially supported by Eisenberg, Cameron, Pasternack, and Tryon

(1988) who incorporated these tasks in their study of four and five-year-old children. They reported that the relationship between peer nominations of sharing and observed sharing was non significant. They did report, however, that peer nominations of helping were significantly related to observed helping. In one study involving adolescents subjects, Wentzel (1991) reported that peer nominations of socially responsible behaviors identified as helping, sharing, and cooperating were related to classroom academic achievement. Perhaps the use of such nomination measures with young children is premature and may prove more meaningful and reliable when used with older children or even adolescents.

Although there were no significant relationships in this study between peer nominations and observed prosocial behaviors, an interesting pattern emerged when comparing the frequencies of behaviors within the two measures. An examination of the frequencies of observed prosocial behaviors indicated that children exhibited more cooperating acts followed by helping, sharing, and comforting. This was also true for the peer nomination data where cooperating was the category most often referred to by the children when nominating their peers, followed by helping, sharing, and then comforting.

One possible explanation for this pattern of similarities may be attributed the amount of time these children spend together providing ample opportunities to observe each others' behaviors. Hymel and

Rubin (1985), for example, reported that children may be considered as useful sources of information concerning their peers' social behaviors due to the amount of time they spend together and the variety of experiences encountered within the same setting. It may be possible to conclude that the pattern of similarities in the nomination and observation data were a reflection of the months these children had spent interacting with one another prior to the implementation of this study.

Incidents of Prosocial Behaviors in the Classroom

Children engaged more in cooperation than any of the other prosocial behaviors. Iannotti (1985) and Cauley and Tyler (1989) also reported on the higher frequencies of cooperative actions as opposed to other prosocial categories. Several reasons may have contributed to the higher frequencies of cooperating behaviors. It was apparent during the observational data collection phase of this study that the way in which activities were structured provided for greater opportunities for cooperative behaviors to occur among the children. For example, projects such as group painting activities were presented by the teachers which required mutual participation and cooperation on the children's part. Other activities included games which required the cooperative participation and involvement of at least two children.

These observations raise several questions. Most important, would the frequencies of helping, sharing, and comforting increase within the classroom setting if more opportunities were presented by the teacher through the activities and incorporated into their daily programs? Could the reason for the high frequencies of cooperative behaviors be attributed to the verbal emphasis by teachers and possibly the reinforcement of these behaviors more often than others? Gelfand et al. (1975) reported that adult praise and reinforcement can motivate prosocial behaviors. If teachers place more emphasis on cooperation among the peers since these behaviors minimize classroom disruption, then it is possible that teachers communicate to the children the importance of cooperative behaviors in the classroom more so than helping, sharing, and comforting.

Another reason for the comparatively higher frequencies of cooperative acts may be that the nature of these behaviors requires positive reciprocal interaction among peers. As previously noted, the nature of the classroom activities provided by the teachers required joint effort on the children's part. Assuming that children enjoy participating in these activities, then they may perceive cooperation as necessary for the continuation of play or joint tasks.

It is also possible that children engaged more in cooperative behaviors because through these extended encounters, they may be presented with the opportunities for communicating and asserting their views and ideas. During the observational phase of this study,

for example, it was noticed that children frequently engaged in everyday conversation about their lives while they cooperated amongst themselves. These behaviors were thus part of the normal flow of events in the classrooms. Sharing behaviors, on the other hand, are characterized by brief encounters between the initiator and the recipient of those acts. Since they are brief encounters, it may be likely that they provide personal satisfaction as opposed to extended reciprocal interaction as was the case with cooperating.

The comparatively lower rates of these behaviors may also be attributed to the nature and organization of the classrooms in which the observations took place. For example, the lower sharing rates may reflect the abundant materials provided for these children. In the four centers, many activities included enough materials for children to use individually, thus minimizing the need to share. The centers were supportive environments where teachers consistently tried to minimize conflicts and rapidly solved problems as they occurred. It may then be possible to conclude that these supportive environments minimized emotional and physical discomforts and in turn limited the need for comforting behaviors among the children.

The lower rates of helping may be attributed to the independent nature of kindergarten children. At this age, children are more inclined to work on portraying an image of "I can do it by myself" as opposed to asking others for assistance. These children may also perceive that what applies to them may apply to their peers, thus

minimizing helpful initiations. Bredekemp (1987), for example, reported that kindergarten children are optimistic about their own abilities and skills and are confident that they can achieve tasks independently.

Theoretical Perspectives

The two theoretical perspectives that have formed the basis for this research may provide several important insights concerning the outcomes of the study. From the standpoint of social cognition, (Shantz, 1983), children's prosocial behaviors emerge and are strengthened primarily as a function of increased levels of perspective taking skills, which may enable them to anticipate the needs of others (Damon, 1988). If perspective taking is a precursor to prosocial responding, and since the children in this study exhibited a variety of prosocial behaviors, then it may be argued that those children have at least some ability to perceive the needs of others and behave accordingly. Social cognitive research also emphasizes the process of self/other differentiation as a necessary component of perspective taking (Shantz, 1983). If this is the case, it may follow then that children in this study have achieved this developmental milestone, allowing them to focus away from the self and understand that others' experiences differ from their own.

From the perspective of attachment theorists such as Bowlby (1972), the quality of early parent-child relationships has a profound

effect on the child's later emotional and social development. Children who have experienced warm, consistent, and empathic care as infants are more likely to perceive themselves as worthy individuals who display socially competent behaviors and are more oriented towards peers (Bretherton, 1985; Pastor, 1981). Conversely, children who have experienced early relationships characterized as rejecting and unresponsive may be expected to develop poor social skills in addition to negative self-perceptions, heightened by feeling of unworthiness (Erickson, Sroufe, & Egeland, 1985).

Viewed from this perspective, the quality of early parent-child relationships may be a contributing factor accounting for both the prosocial behavior observations and self-concept evaluations. In this study, there were children who exhibited high frequencies of prosocial behaviors while others did not. There were also differences in the children's perceived quality of the self. Since some of the relations between the prosocial behavior categories and self-concept were significant, it is interesting to consider possible relationships between early attachment and later prosocial behavior and self-concept for future research.

One argument is that children who displayed a relatively higher frequency of prosocial behaviors have experienced positive early relationships. Another argument is that children who scored relatively higher on the self-concept measure have also experienced warm and consistent care. Those children, according to the

attachment perspective, have incorporated perceptions of their primary caregivers as helpful and empathic and have manifested these behaviors with confidence within the context of the peer group. Although a significant relation between total self-concept and prosocial behavior categories was not found in this particular study but found for individual categories, the attachment perspective may still be applied to explain the differences in children's prosocial responding and also the wide range of self-concept scores. Considering that positive correlations were found between self-concept and prosocial behavior in other studies (Cauley & Tyler, 1989; Larrieu & Mussen, 1985), it is possible to argue that these relations may be a reflection of the quality of early parent-child relationships.

Implications for Future Research

Future researchers need to consider several methodological issues when planning a study similar to the present one. First, a larger the sample size makes it more likely that its means and standard deviations are representative of the means and standard deviations of the population. Second, increasing the number of observations per child may add to a larger variance of frequency scores within each of the separate prosocial behavior categories as well as for the aggregate.

Third, in order to investigate if varying the length of the observational intervals has an effect on the coding of these

behaviors, researchers may consider reducing this interval to one minute or less per child as opposed to the two minute intervals used in this study. For example, a small group of children may be observed over a five minute period using 15-second intervals. within those five minutes, each child would be observed at least twice and thus may have a higher frequency of prosocial acts, even if the child was still engaged in the same behavior as when first observed.

Although other methods are used to assess prosocial behaviors such as situational tests and sociometric questionnaires, the naturalistic observation method used in this study is perceived as providing highly dependable and accurate estimates of children's prosocial behaviors (Eisenberg & Mussen, 1989). However, in order to measure these behaviors as completely and accurately as possible, peer ratings and teacher questionnaires may be used in combination with the naturalistic observations. In this study, for example, no relationship was found between teacher and peer ratings and prosocial behaviors, except for requested prosocial behaviors. Researchers are therefore cautioned against using these evaluative measures as sole sources of information regarding the naturally occurring prosocial behaviors. Since there have been reports of significant relationships between teacher evaluations and observed prosocial behaviors (Cauley & Tyler, 1989), researchers are encouraged to use these questionnaires in conjunction with observational measures.

According to the data of the present study, total self-concept scores in and of themselves did not predict the frequency of total prosocial behaviors. It may be that other aspects of self-concept should be explored to see if there is some connection. Self-esteem is one of those aspects. One could employ a self-esteem measure (the evaluative dimension of self-concept) to explore its relation to prosocial behaviors. While self-concept involves a cognitive understanding of personal skills and abilities (Marsh & Shavelson, 1985) self-esteem involves the affective evaluation of personal abilities (Harter, 1983). It is possible that an understanding and awareness of physical, social, and personal abilities (self-concept) may not be related to the frequency of children's prosocial behaviors, but what may be related is how children feel about and evaluate these abilities (self-esteem) may. For example, children who <u>feel</u> positively about themselves may also view others in a positive manner, thus perceiving them as individuals worthy of positive interactions.

Since the research in prosocial behavior and self-concept is still very limited, this presents future researchers in the area with many opportunities for creative exploration. Researchers may consider using a combination of self-concept measures to ensure consistency in children's responses. For example, the items on the Pictorial Scale of perceived Competence and Social Acceptance for Young Children (Harter & Pike, 1983) are similar to those on the Purdue used in this

study. A comparison of the results of the correlations between the two individual measures and prosocial behaviors would be useful.

The lack of consistency and stability of agreements concerning the conceptual and measurement issues of self-concept have been apparent since the introduction of this concept by William James in 1890. This lack of agreement is especially exaggerated at the early childhood level. Some have argued (Marshall, 1989) that young children are not yet capable of fully comprehending their abilities and limitations. Accordingly, measures that require such evaluative responses may not yield measurable and reliable information concerning children's developing skills.

Another issue that needs to be considered is the response set that may be established during the interview. It is possible that some children may choose particular responses which they perceive as "pleasing" the examiner. It may also be that some children choose positive responses in order to create a positive image about themselves, especially when adult examiners are involved. Several precautions can be taken to maximize the consistency of children's responses to items on self-concept scales. Investigators may consider administering the measure on two separate occasions during the course of the study. An alternate way would be to repeat several test items at a later point in time in order to determine consistency of responses.

To further examine the relations between prosocial behavior and self-concept, researchers need to consider the growing number of studies indicating significant relationships between the quality of early parent-child relationships and later social emotional functioning (e.g. Erickson, Sroufe, & Egeland, 1985; Matas, Arends, & Sroufe, 1978; Pastor, 1981; Sroufe, Fox, & Pancake, 1983; Sroufe & Waters, 1977). Given this body of evidence, future researchers are encouraged to design longitudinal studies which combine early measures of attachment, such as the Ainsworth Strange Situation procedure (1972) with later self-concept measures such as the Harter and Pike Scale (1983) and naturalistic observations of prosocial behavior.

Implications for Practice

Early childhood educators may promote children's prosocial behaviors and their self-concepts in a variety of ways. Modeling, reinforcement, and specific prosocial activities can especially be powerful ways of encouraging children's prosocial behaviors. When children observe their teachers as consistently and regularly exhibiting acts of consideration, helpfulness, and nurturance they are likely to imitate these behaviors which, in turn, enhances their own prosocial responding (Eisenberg & Mussen, 1989). Classroom teachers are also encouraged to observe for prosocial interactions among the children and to systematically reinforce these behaviors in

appreciative ways. Reinforcement of these behaviors may strengthen the likelihood that prosocial actions are repeated.

To increase the effectiveness of modeling and reinforcement strategies, it may be useful for teachers to implement a variety and a combination of techniques. For example, teachers may model and reinforce positive behaviors but should also implement specific prosocial activities within their daily programs. Sharing stories that portray prosocial models, for example, and discussing these stories while placing special emphasis on the positive behaviors may encourage children's prosocial responding. In addition, planning group activities that require extended cooperation and sharing among the children is also encouraged.

Teachers can also work on facilitating children's positive self-concepts in a number of ways. Involving children in developmentally appropriate classroom activities that challenge their emerging physical, cognitive, and social selves provide children with means for exploring and enhancing their abilities. Teachers are also encouraged to positively stress and reinforce individual differences among the children thus enhancing autonomous feelings and worthiness. Teachers may also assign appropriate classroom responsibilities to children that enhance their sense of self as individuals who are trusted and worthy of these responsibilities.

Summary

The purpose of this study was to investigate the possible relations between the prosocial behaviors of kindergarten children and their self-concepts. Although the findings do not indicate a clear link between the two variables, possible relationships may be explored from the attachment perspective. Future researchers may investigate parental child-rearing practices and how they relate to their children's later social and emotional functioning. Moreover, considering the overwhelming differences between the frequencies of cooperating behaviors in comparison to helping, sharing, and comforting, future research should investigate various classroom practices that may have contributed to these differences. It may be possible for teachers to apply the techniques used in promoting cooperative acts to other prosocial behaviors.

APPENDIX A

Samples of The Purdue Self-Concept Scale For Preschool Children, and Permission Form

The Purdue Scale as Categorized into Physical, Social, and Personal Self-Concepts

For the purposes of this study, the 40 items on the Purdue were classified into three categories: physical self-concept, social self-concept, and personal self-concept.

The physical self-concept category includes items: 1, 3, 5, 8, 10, 13, 21, 22, 26, 29, 35, 37.

The social self-concept category includes items: 7,11,14, 17, 18, 19, 20, 23, 27, 28, 31, 33, 34, 36, 38.

The personal self-concept category includes items: 2, 4, 6, 9, 12, 15, 16, 24, 25, 30, 32, 39, 40.

PURDUE UNIVERSITY

DEPARTMENT OF
PSYCHOLOGICAL SCIENCES

June 18, 1991

Ms. Tagreed Abutalabs
9314 Cherry Hill Road, Apt. 824
College Park, MD 20740

Dear Ms. Abutalabs:

You have my permission to reproduce and use the Purdue Self Concept Scale in your research work, and to modify the scale for your use as you see fit.

Some of the proposed changes that you outlined over the phone sound quite interesting. If the changes involve only the elimination or rewording of a few items, you should of course note which items were changed in any subsequent publications based on use of the scale. If the changes involve a major remodeling of the scale, you might rename it (e. g., the Abutalabs Self Concept Scale) as a first step in establishing your own scale (based on modification of the Purdue Scale) in the literature. Subsequent work on validity, reliability and use of the instrument would then apply to your scale.

Good luck with your research project.

Sincerely,

Victor G. Cicirelli

Victor G. Cicirelli
Professor of Developmental
and Aging Psychology

Examiner's Name _____

SCORING SHEET
PRE-SCHOOL SELF CONCEPT

Name of Child _____ Age _____ Sex _____

School _____ Teacher _____ Date _____

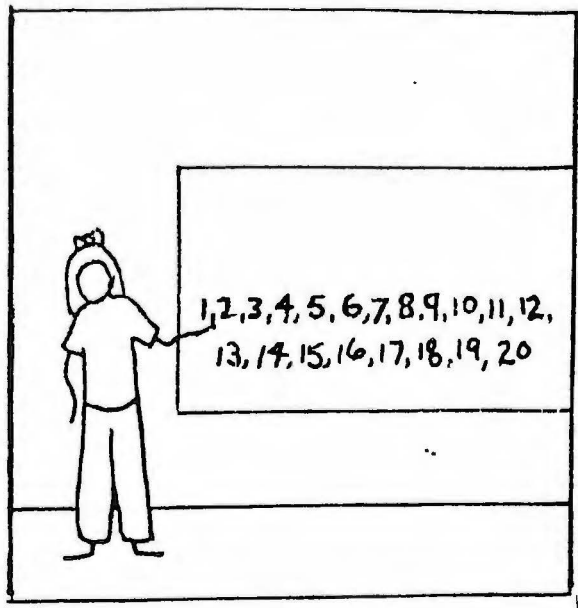
Each item is scored as follows: If the child chooses the response alternative to an item which is a positive self-description, that item is given a score of one point; if he endorses a negative self-description, that item is given a score of zero. Score on the test is the sum of the item scores.

Items in which the positive response alternative is the left picture of the item are: 1, 2, 5, 7, 9, 12, 14, 15, 17, 19, 21, 23, 24, 27, 30, 33, 36, 38, 39.

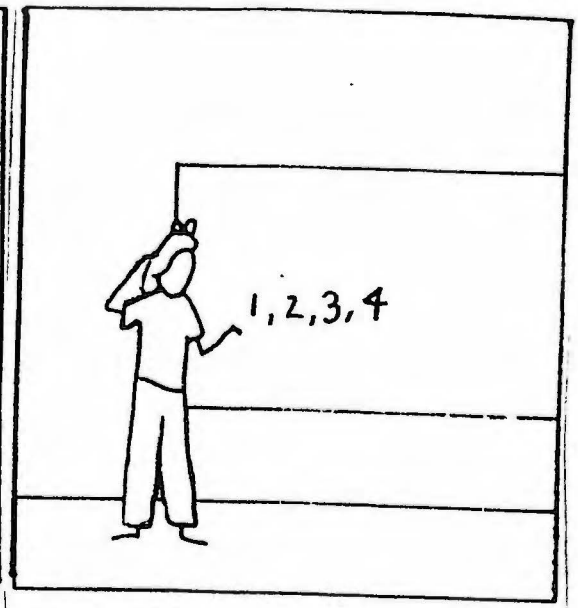
Items in which the positive response alternative is the right picture of the item are: 3, 4, 6, 8, 10, 11, 13, 16, 18, 20, 22, 25, 26, 28, 29, 31, 32, 34, 35, 37, 40.

Total Score _____

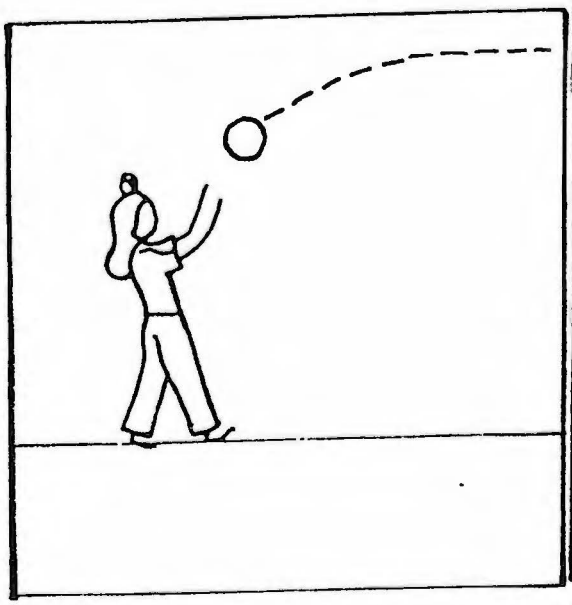
1 _____	11 _____	21 _____	31 _____
2 _____	12 _____	22 _____	32 _____
3 _____	13 _____	23 _____	33 _____
4 _____	14 _____	24 _____	34 _____
5 _____	15 _____	25 _____	35 _____
6 _____	16 _____	26 _____	36 _____
7 _____	17 _____	27 _____	37 _____
8 _____	18 _____	28 _____	38 _____
9 _____	19 _____	29 _____	39 _____
10 _____	20 _____	30 _____	40 _____



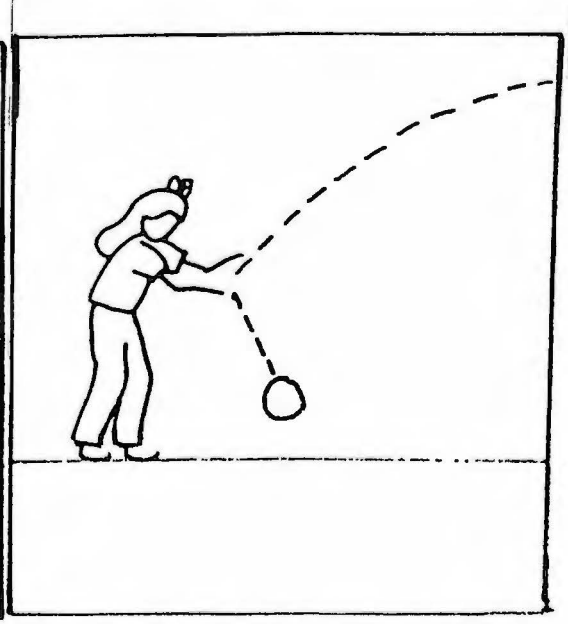
This child can count to twenty.



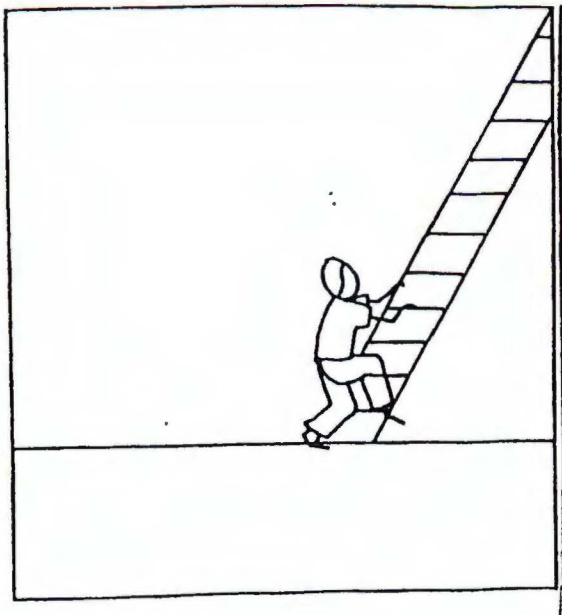
This child can not count to twenty.



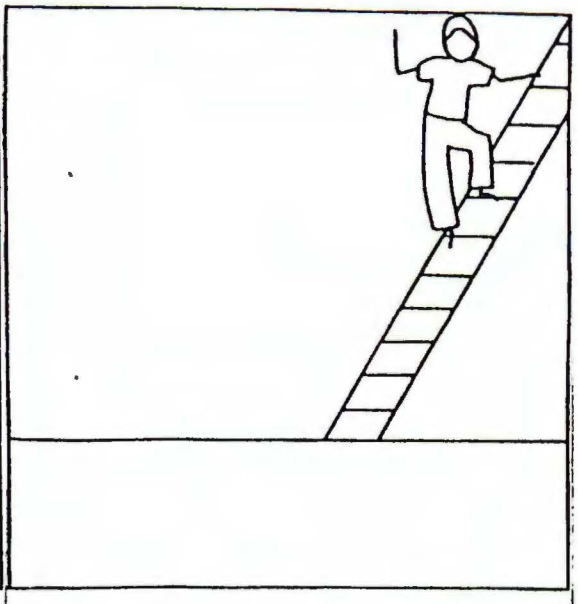
This child can catch a ball very well.



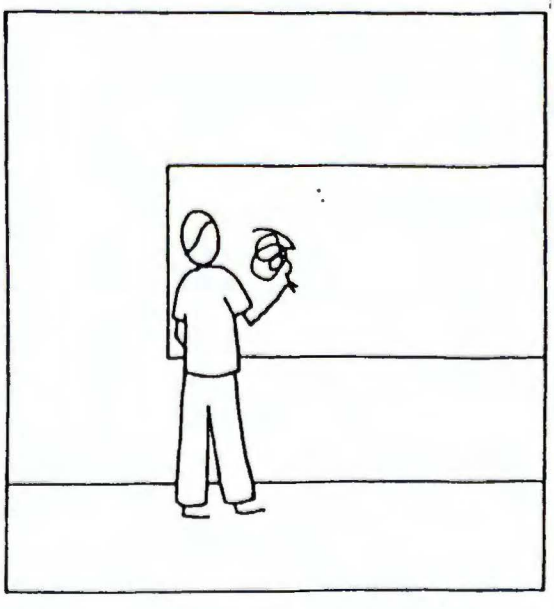
This child cannot catch a ball so well.



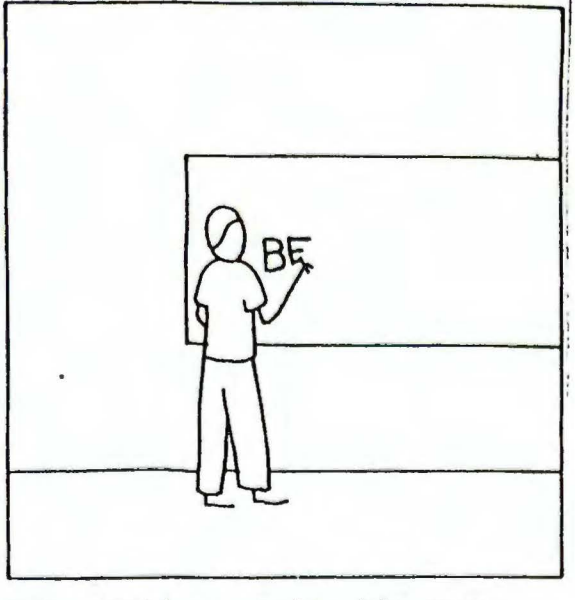
This child can't climb so high.



This child can climb high.



This child can not write his name.



This child can write his name.

APPENDIX B

Prosocial Behavior Observation Instrument

Prosocial Behavior Observation Instrument

Child# _____ Gender _____ Center _____

Obs	Helping				Sharing				Comforting				Cooperating			
	S	R	N	G	S	R	N	G	S	R	N	G	S	R	N	G
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																

Prosocial Behavior Observation Instrument

Child# _____ Gender _____ Center _____

Obs	Helping				Sharing				Comforting				Cooperating			
	S	R	N	G	S	R	N	G	S	R	N	G	S	R	N	G
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																

Child# _____ cont.

Obs	Helping				Sharing				Comforting				Cooperating			
	S	R	N	C	S	R	N	C	S	R	N	C	S	R	N	C
13																
14																
15																
16																
17																
18																
19																
20																
Total:	Helping				Sharing				Comforting				Cooperating			
	S	R	N	C	S	R	N	C	S	R	N	C	S	R	N	C

Total: H= S= Cm= Cp=

Total: Prosocial Behavior=

APPENDIX C

Examples of Prosocial Behavior Categories

The following examples were given to 25 doctoral students to evaluate their contents in order to establish content validity for the operational definitions of helping, sharing, comforting, and cooperating.

HELPING

1. Sally noticed that Joe was having difficulty with carrying a large box, she walked over to him and assisted him with carrying it.
2. Nancy fell down when she bumped into the chair and Sarah assisted her with getting up from the floor.
3. Teacher asked Sam to put the rest of the puzzle pieces into their box because it was time to clean up, and Sam did so.
4. Tommy noticed that mark was having difficulty with zipping up his coat and assisted him with doing so.
5. John removed a chair that was in the teacher's way so she would not fall over it.
6. David accidentally tore the paper he was drawing on and Marsha got a piece of tape and taped the paper back together.
7. Julie called to a group of children to go with her to the block corner and assist Charlie with placing the blocks back on the shelves.
8. Ben asked for some clay and Donna brought some over to him.
9. Janice found the scissors that the teacher was looking for and gave them to her.
10. Suzie noticed that Pam was trying to stack the blocks without success, offered to help and did so.

11. At the teacher's request, John retrieved the crayons.

12. Tim searched for the red crayon that Julie was looking for.

13. Suzie was stacking the construction paper into a pile and asked Paul to give her the one that was close to him and Paul does so.

14. Teacher said that she needed a helper in the reading corner and Laura volunteered.

15. During snack, Jim spilled his milk and Lisa got paper towels enough for both of them and assisted with cleaning up the milk.

16. Ben noticed that one of the game cards was missing and asked if anyone would look for it with him, Jennifer volunteered and began to look.

17. Barb dropped some of the puzzle pieces she was carrying and Sue assisted her with picking them up.

18. Joey was having difficulty opening the lid of a jar and Phillip asked if he could help and attempted the same task.

19. Teacher asked David if he would give the glue she has to Don, and he did so.

20. Joe asked Sarah to go and help Tim with putting the books back on the shelves and she responded by doing so.

SHARING

1. Jimmy poured milk for himself and for Joe.

2. Frank had a piece of clay in his hand, broke it and gave some to Carol.

3. Janice took out several pieces of construction paper and crayons,

placed them on the floor and called another child to join her.

4. Suzie walked up to Rachael with a bunch of plastic flowers and said, "here, these are for you" and gave them to her.

5. Barb asked John if she could use the glue that he was using and John gave her the glue.

6. In the reading center, Mark took out a book then called over to Corey to join him.

7. The teacher asked Sam to share one of the books he was looking at with Lisa and Sam did so.

8. Neil was watching Donna while putting a puzzle together and she asked him to join her.

9. Teacher asked Sherry to share her scissors with Barb and she did so.

10. Joanna was complaining because she ran out of glue and Phillip gave her his glue container and said that she can have some of his.

11. John was looking around while holding up his painting to the wall, Betty brought over the tape she was using and taped the picture for him.

12. After Kim finished looking at her book, she gave it to Carol to look at.

13. John could not find anywhere to sit so Sherry moved over and motioned him to sit next to her.

14. Teacher asked Ben if he would give his sponge to Debbie so she can wipe off the other table and Ben did so.

15. Bruce offered Betty some imaginary cookies from a plate he was

carrying.

16. David asked Nancy if he could play with the trucks she was playing with and she motioned him to sit down next to him and they play together.

17. Janice poured imaginary tea into the tea cups and asked if anyone would like some tea.

18. Teacher asked if anyone had an extra napkin and Greg gave her one of his.

19. Bobby noticed that Ann was looking for a blue crayon and offered her the one he was using.

20. Laura brought a number of pencils to the table and asked if anyone would like a pencil.

COMFORTING

1. Tracy fell and began to cry while Ben put his arm around her shoulder and asked if she was alright.

2. Sarah noticed that Jim was in the corner looking sad, she went over to him and started talking about how much fun they had earlier with their game.

3. Tom was crying because he left his lunch box on the bus, Don put his arm around him and told him not to worry and that the teacher will get it.

4. Sue looked sad after her mother left and Barb told her not to worry because her mother will be back.

5. Teacher asked John if he could try to cheer up Cathy, he went over to where she was sitting and started talking to her.

6. David was upset because it was time to clean up and he hadn't finished the picture he was working on, Phillip said that he could probably finish it later.

7. Tracy moved closer to Allison who looked sad and put her arm around her.

8. After the teacher put a bandage on Julie's finger, Tommy asked her if she was feeling any better.

9. Paul told the teacher that Jim fell down then he went over to Jim and asked if he was alright.

10. After checking Barb's scratched leg, the teacher asked Ann to keep her company and Ann stayed next to Barb checking her leg.

11. Tim was upset because his mother was late and Paula assured him that she would be there soon.

12. Sarah spilled the milk while reaching for it and reacted with embarrassment, Joey responded by telling her not to worry.

13. After the teacher moved away after talking to Teresa about throwing the crayons, Linda moved closer and put her arm around her.

14. Liza was sadly explaining to Tom that her baby brother was sick, Tom said,"don't worry, all babies get sick, he'll get better soon".

15. Diane was upset because Julie and Rickie would not let her play with them. Greg told Diane not to worry and that they can play somewhere else.

16. One of the buttons on Kim's sweater came off and she was clearly upset. Denise brought the situation to the teacher's attention and then kept Kim company until the teacher got there.

17. Noticing that Kate was still scared because she almost fell off

the chair, Danny put his hand on her shoulder and told her to be careful next time.

18. Not aware of what was bothering Jill, Stephanie sat next to her and asked, "what's wrong?"

19. After the teacher's finger was caught in the desk drawer, Shelly went over and asked if her finger was feeling any better.

20. When Sally walked into the classroom with a bandage on her forehead, Erik ran up to her and asked what had happened and if she was feeling better.

Cooperating

1. Sally was sitting with two other children working on a puzzle.

2. Bill put the crayons away in response to the teacher's request.

3. Gary was in the reading corner with Ben looking at a book and discussing its contents.

4. Diane had two puppets and asked Steve to join her in playing with them and he did.

5. George was headed for the reading area with a puzzle but responded to the teacher when she asked him to stay at the activity table.

6. Donna reminded Joe that he needed to wash his hands before snack and he responded to this reminder by washing his hands.

7. Jane was in the housekeeping area with Dan singing a song.

8. John went over to a group of children who were playing with a game and joined them.

9. Sarah was playing with the water at the sink when the teacher asked her to join the rest of the group for circle and responded by joining the rest of the group.

10. Sam and Kathy were playing together on a pretend boat.

11. The teacher asked Ben to get his coat and line up and he did so.

12. Tim wrote his name on the painting he completed in response to the teacher's request.

13. Pat was in the block area building a house with John and Tracy.

14. Frank and Sally were listening to music and dancing together.

15. Debbie and Bruce were building a house together from clay.

16. Kim asked Janice to go over to the block area and play with her and Janice responded to this request.

17. Frank and Joan were watching the pet turtle and discussing its sleeping and eating habits.

18. Sarah and Ben were taking turns with watering the plants.

19. Ben asked David if he can join him in his block building activity, David agreed and they began to play together.

20. In the housekeeping area, Lisa and Justin were pretending to bake bread.

APPENDIX D

Peer Nomination Scoring Form

Instructions: Children were asked to nominate their peers who they perceived as displaying any or all of the prosocial behaviors. Children's responses were coded on this form under the nominated child's name.

Peer Nomination Scoring Form

Center: _____

Child Name/Number				Name/Number				Name/Number			
H	S	Cm	Cp	H	S	Cm	Cp	H	S	Cm	Cp

Child Name/Number				Name/Number				Name/Number			
H	S	Cm	Cp	H	S	Cm	Cp	H	S	Cm	Cp

APPENDIX E

Teacher Rating Forms

Teacher Rating Form: Prosocial Behavior

The following eight questions describe children's spontaneous and requested helping, sharing, comforting and cooperating behaviors. Please respond to each question by placing the appropriate number indicating how true the statement is for this child in the designated space to the right of each item.

Name of Child _____ Gender: (please circle) M / F

Not Very True = 1 Sort of True = 2 Pretty True = 3 Really True = 4

1. Spontaneously helps others with carrying objects, cleaning up, searching for materials, etc. _____

2. Does not usually help others unless he/she is asked to do so by you or other children. _____

3. Spontaneously shares materials in his/her possession with others. _____

4. Does not usually share materials with others unless he/she is asked to do so by you or other children. _____

5. Spontaneously comforts others who are sad, angry, or physically hurt. _____

6. Does not usually comfort others unless he/she is asked to do so by you or other children. _____

7. Spontaneously cooperates with others while playing games, working on projects and group activities. _____

8. Does not cooperate with others unless he/she is asked to do so by you or other children. _____

Teacher's Rating Scale
of Child's Actual Competence and Social Acceptance*
Form P-K

Child's Name _____ Class/Grade _____ Rater _____

Instructions: Place the appropriate number indicating how true the statement is for this child in the designated space to the right of each item:

Not Very True = 1,	Sort of True = 2,	Pretty True = 3,	Really True = 4

Item Order and Description	Cognitive Competence	Peer Acceptance	Physical Competence
1. Good at puzzles	1 ___		
2. Has lots of friends		2 ___	
3. Good at swinging			3 ___
4. Gets stars on papers	4 ___		
5 Stays overnight at friends		5 ___	
6. Good at climbing			6 ___
7. Knows names of colors	7 ___		
8. Has friends to play with		8 ___	
9 Can tie shoe			9 ___
10. Good at counting	10 ___		
11. Has friends on playground		11 ___	
12. Good at skipping			12 ___
13. Knows alphabet	13 ___		
14. Gets asked to play by others		14 ___	
15. Good at running			15 ___
16. Knows first letter of name	16 ___		
17. Eats dinner at friends		17 ___	
18. Good at hopping			18 ___
Column (Subscale) Total:	☐	☐	☐
Column (Subscale) Mean: (Total Divided by 6)	_____	_____	_____

Comments:

*Parallels the Pictorial Scale of Perceived Competence and Acceptance for Young Children, Susan Harter and Robin Pike, University of Denver, 1983.

APPENDIX F

Parent Information and Permission Form

Dear _____

I am a doctoral student at the University of Maryland interested in knowing more about the social behaviors of kindergarten children. I am presently involved in a research study designed to learn more about how children think of and describe themselves and how they engage in helping, sharing, comforting, and cooperating behaviors in the classroom.

Each child will first be observed during the regular classroom activities over a period of four weeks. These observations will not interrupt the regular activities of the classroom and will not be videotaped. Children will then be asked to participate in individual sessions with the researcher in which they will respond to a series of pictures presented in a game format. This session will take less than twenty minutes and will not interfere with your child's regular activities. Children find these activities to be enjoyable; but of course they may choose to decline to participate in this activity.

I am requesting permission for your child to participate in this study. If you should need any further information please do not hesitate to contact me or your child's teacher.

I give permission for my son/daughter _____ to participate in the course of the study outlined above.

Date of Birth: ____/____/____
Month/Day/Year

Number of Siblings: _____

Signature _____ Date _____

Thank you for your cooperation.
Sincerely,

Tagreed F. Abu Taleb
University of Maryland

APPENDIX G

Table of Correlations and Intercorrelations Among the Prosocial Behavior, Self-Concept, Teacher Ratings and Peer Nomination Variables

Table G 1

Correlation Matrix for Prosocial Behavior, Self-Concept, Teacher Ratings, and Peer Nomination Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Self Concept	1.00														
2. Physical S.C.	.90*	1.00													
3. Social S.C.	.93*	.69*	1.00												
4. Personal S.C.	.90*	.64*	.69*	1.00											
5. TR Self Concept	-.16	-.14	-.28	.16	1.00										
6. TR Cog. Comp.	-.20	-.23	-.23	-.09	.47*	1.00									
7. TR Peer Accpt.	.15	.04	.03	.21	.73*	.18	1.00								
8. TR Physical Comp.	-.19	-.11	-.15	.15	.74*	.27	.33*	1.00							
9. Prosocial Beh.	.21	.24*	.11	.25*	-.01	-.24	.10	-.15	1.00						
10. T. Spontaneous	.27*	.30*	.18	.29*	-.03	-.31	.16	-.07	.81*	1.00					
11. T. Requested	.05	-.16	-.02	.09	.03	-.16	-.01	-.16	.73	.19	1.00				
12. T. Helping	.01	.05	-.01	-.01	.22	.15	.07	-.02	.54*	.34*	.52*	1.00			
13. T. Sharing	.11	.14	.13	.04	-.18	.07	-.25	-.41	.49*	.36*	.41*	.34*	1.00		
14. T. Comforting	.02	.07	.05	-.08	-.02	.02	.09	-.14	-.07	-.09	-.01	.02	.20	1.00	
15. T. Cooperating	.22*	.11	.31*	.11	-.11	-.40	.14	-.10	.89*	.80*	.59*	.20	.20	-.09	1.00
16. S. Helping	.02	.05	.03	-.03	.28*	.11	.18	.00	.49*	.35*	.42*	.88*	.24*	.17	.17
17. S. Sharing	.16	.16	.20	.11	-.13	.10	-.02	-.25	.47*	.42*	.30*	.38*	.86*	-.09	.19
18. S. Comforting	.02	.07	.05	-.08	-.02	.02	.10	-.14	-.07	-.09	-.01	.02	-.10	.00	-.09
19. S. Cooperating	.25*	.27*	.15	.31*	-.12	-.49	.16	-.01	.57*	.86*	-.04	-.10	.08	-.12	.75*
20. R. Helping	.00	.04	-.06	.02	.02	.15	-.13	-.03	.31*	.12	.41*	.63*	.31*	-.11	.04
21. R. Sharing	.01	.04	.03	-.10	-.15	.04	-.30	-.35	.29*	.11	.41*	.14	.74*	-.07	.11
22. R. Comforting	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23. R. Cooperating	.05	.04	-.01	.12	.05	-.11	.10	-.18	.67*	.16	.93*	.36*	.20	.04	.63*
24. TR Prosocial Beh.	.06	.04	.00	.13	.43*	.22*	.35*	.16	.16	.16	.09	.11	.17	-.05	.11
25. TR Spontaneous	.14	.15	.14	.11	.22*	.15	.46*	.17	.01	.18	-.19	-.01	-.01	.03	.02
26. TR Requested	.14	-.14	-.16	-.02	-.02	-.11	-.33	-.02	.15	-.12	.25*	.07	.15	-.18	.03
27. PN Helping	-.12	-.02	-.04	-.01	.57*	.19	.18	.26*	-.12	-.11	-.15	-.15	.20	-.17	-.16
28. PN Sharing	-.15	-.12	-.19	-.14	.13	-.10	.24*	.12	-.15	-.00	-.12	-.35	-.05	.01	.04
29. PN Comforting	.03	-.17	.01	.15	.46*	.31*	.25*	.13	-.02	-.11	.10	.15	.03	-.04	-.16
30. PN Cooperating	.12	.14	.18	.01	.37*	.14	.42*	.10	-.14	-.00	-.22	-.13	-.14	-.01	-.14
31. PN Total	.02	.02	.01	.00	.41*	.20	.40*	.22*	-.13	-.07	-.12	-.14	.00	-.11	-.10

Table G 1 (Continued)

Variables	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
16. S. Helping	1.00															
17. S. Sharing	.31*	1.00														
18. S. Comforting	.09	-.09	1.00													
19. S. Cooperating	-.12	.08	-.16	1.00												
20. R. Helping	.19	.27*	-.11	-.02	1.00											
21. R. Sharing	.03	.29*	-.07	.04	.24*	1.00										
22. R. Comforting	.00	.00	.00	.00	.00	.00	1.00									
23. R. Cooperating	.40*	.19	.04	-.05	.07	.11	.00	1.00								
24. TR Prosocial Beh.	.00	.18	-.05	.13	.24*	.11	.00	.01	1.00							
25. TR Spontaneous	.03	.02	.03	.18	-.06	-.05	.00	-.18	.05	1.00						
26. TR Requested	-.03	.06	-.18	-.13	.18	.15	.00	.20	.22*	.15	1.00					
27. PN Helping	-.02	.19	-.17	-.15	-.15	.16	.00	-.13	.25*	.30*	-.21	1.00				
28. PN Sharing	-.18	.12	.01	.18	-.26	-.17	.00	-.01	.20	.28*	-.21	.22*	1.00			
29. PN Comforting	.10	-.15	-.04	-.14	.01	.17	.00	.14	.11	.27*	-.24	.33*	.23*	1.00		
30. PN Cooperating	-.16	-.19	-.01	.10	.04	-.22	.00	-.21	.34*	.62*	-.51	.45*	.37*	.27*	1.00	
31. PN Total	-.10	.05	-.11	-.10	-.12	-.19	.00	-.19	.33*	.55*	-.44	.72*	.63*	.62*	.80*	1.00

Note. S.C. = Self-Concept; TR = Teacher Ratings; Cog. Comp. =Cognitive Competence; Accpt. = Acceptance; Beh. = Behavior
T. = Total; S. = Spontaneous; R. = Requested; PN = Peer Nomination.

*$p < .05$

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